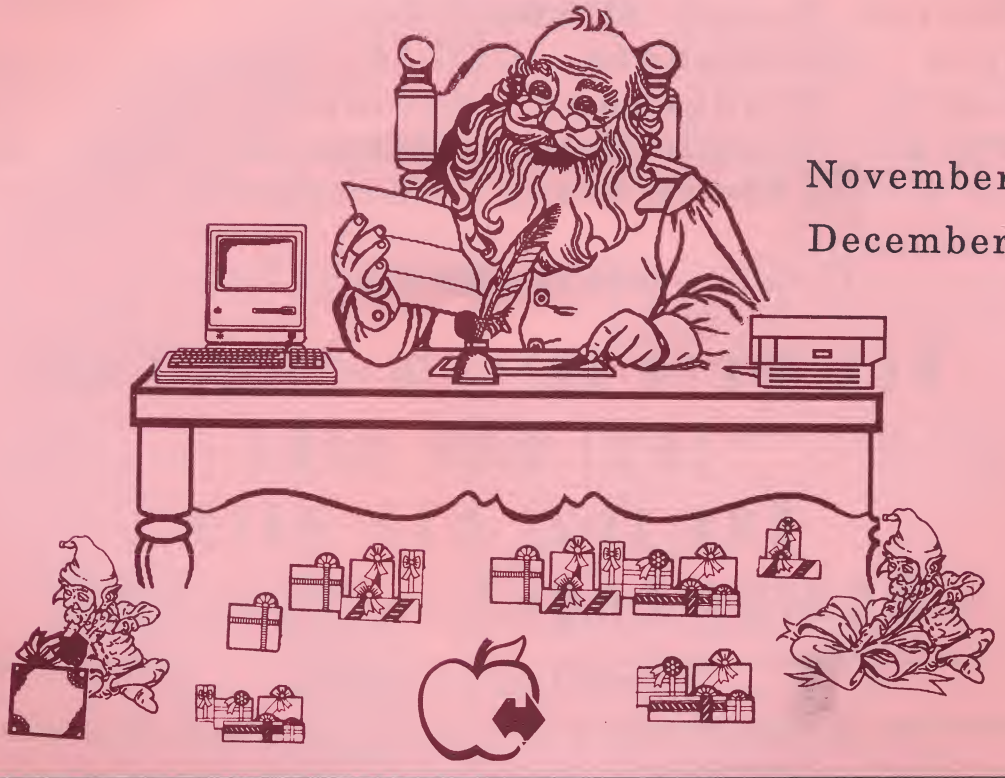
Applecations



November -
December 1989

$3.00
RRP

THE PUBLICATION OF THE
APPLE USERS GROUP (SYDNEY)
Incorporated in N.S.W.

REGISTERED BY AUSTRALIA POST—PUBLICATION No. NBH 3716

Now the Apple II Enthusiast has an Australian Distributor
Totally committed to the Apple II Line -

GS Sales and Imports

All those products you've seen in the American Magazines
are now available in Australia!

Applied Engineering Ram Cards & Internal Hard Drives
Applied Ingenuity Ram Cards & Inner Hard Drives
Thunderwares Thunderscan Didgitizers
MdIdeas Stereo Cards & Didgitizers
AMR 3.5 and 5.25 Disk Drives
OKS Disk Accelerator Cards
Ergatron Mouse Cleaners
Lynx Trackballs

Software Companies such as:

Britanica - Taito - Fanfare - Datasoft - Arcadia
California Dreams - Interplay - Artworx - PBI
Melbourne House- Mindscape - Epyx - Nature Boy
Sierra - Abracadata - Util II - Spectra Graphix
Claris - Broderbund - Accolade - Activision
Toolworks - Beagle Bros - Electronic Arts - Sphere
Three Sixty - Micropose

If you've seen it - We should have it!

For more information call
(02) 688-2701
Fax (02) 636-9219
Dealer Enquires Welcome

A special offer to schools.
Any schools that have purchased a IIgs for the class room, who orders any Software or Hardware product in November or December regardless of price and mentions this advt. in Applecations,will also receive FREE OF CHARGE a copy of the Apple IIgs most popular Paint Program valued at $119.95!

Applecations

the official publication of the
Apple User s Group
(Sydney) Inc.

Applecations is published and posted to current members, 10 times each year. It is sent by surface mail, however specal arrangements can be made with the membership convenor.
Opinions expressed may not be those of AUG (Sydney) Inc.

Registered trade marks appearing here-in, are used only as product reference.

Articles are sought on any AUG and computer related topics.
Contributions can be made by;
Apple
text, AppleWorks files on 5.25 inch disks.
Mac
text, Word, RSG, MacWrite files on 400/800K disks.

Hard-copy pictures accepted, no printed typing please.
OR
uploaded to either AUG- BBS.
Please retain a backup copy.

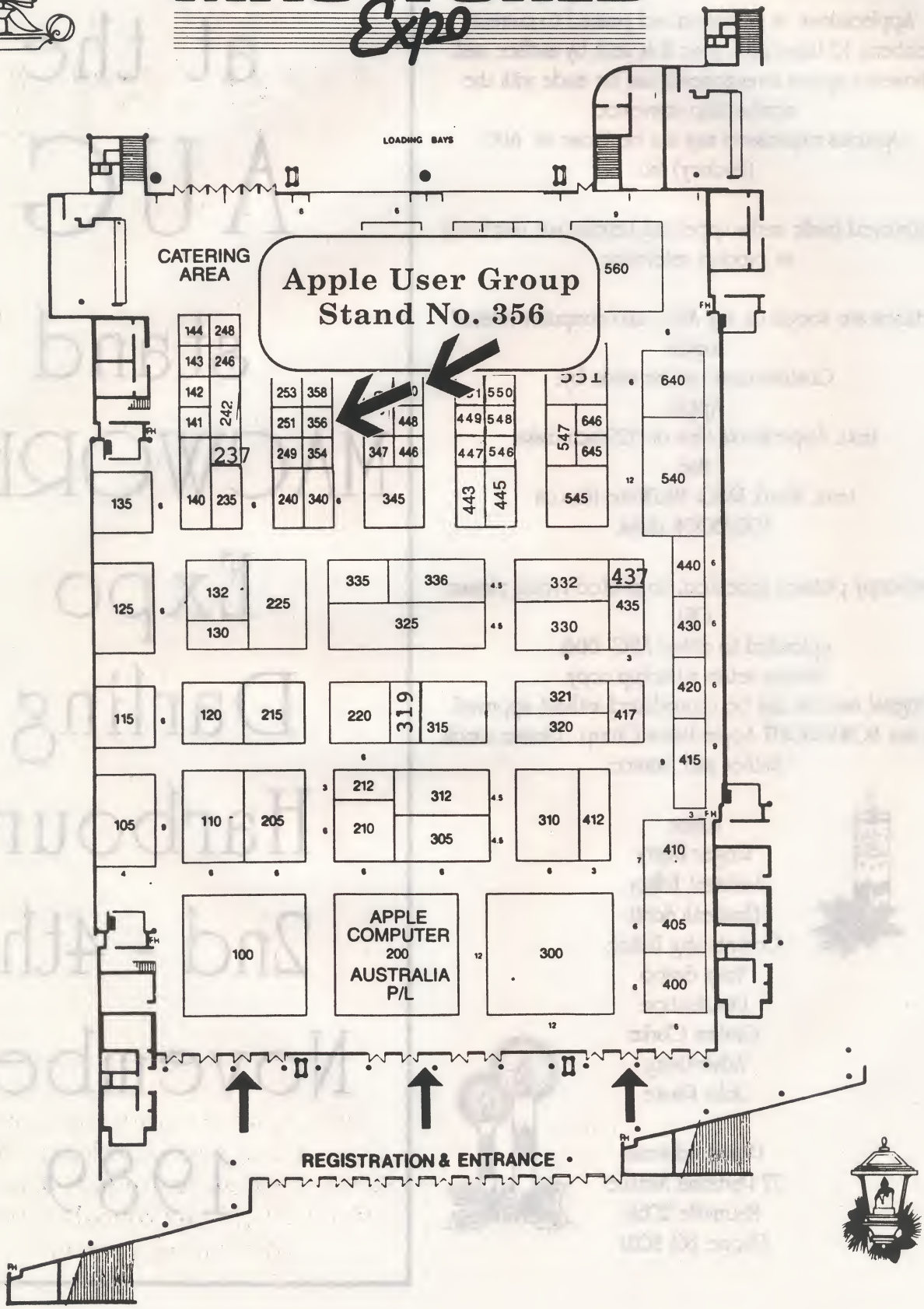
Original material may be reproduced without approval, by any NON-PROFIT Apple Users Group. Please credit Author and source.

Editor:
Roger Perry
Assistant Editor:
Elizabeth Scott
Contributing Editor:
Tony Szabo
Distribution:
Graham Clarke
Advertising:
John Paske

Postal Address:
77 Partanna Avenue
Matraville 2036
Phone: 661 8031

See you at the AUG stand MACWORLD Expo Darling Harbour 2nd - 4th November 1989

AUSTRALIAN MACWORLD Expo



Apple User's Group (Sydney) Inc.

EXECUTIVE

PRESIDENT:	Bill Gletsos	(02) 809-5544
VICE-PRESIDENT:	Jan Howley	(02) 953-3624
VICE-PRESIDENT:	Chris Nelligan	(02) 484-2230
SECRETARY:	Michael Bannigan	(02) 546-7236
TREASURER:	Peter Kazacos	(02) 790-6490
EDITOR:	Roger Perry	(02) 661-8031
LIBRARIAN:	Wal Glynn	(02) 605-3199

COMMITTEE

Membership Conv.:	Graham Clarke	(02) 958-2709
Asst. Membership	Andrew Roagan	
Apple Meetings:	Chris Nelligan	(02) 484-2230
GS	Wayne Short	
Mac Meetings:	Rob Russell	
S.I.G. Coordinators:	(Mac) - Paul Maynard	(GS) Chris Nelligan
BBS SYSOPs:		
Mac -	Richard Kempe	(02) 498-7084 Modem
Apple -	Cameron Brawn	(02) 449-7798 Modem
		(02) 449-5530 Voice
Special Librarians:	Dennis Greenwood(//)	Frank Kenny (GS)
Roy Hancock (GS)	Bill Gletsos (Mac)	Steve Hill (Mac)
	Ron Lombardo & Bruce Hammond (H/C)	
Book Librarian:	John Pinniger	(02) 411 2827
Assistant Treasurer:	Arie Havenaar	
Bulk Purchase	Chris Wanigesekera	(02) 681-3661
Publicity:	John Paske	
Assistant Editor:	Elizabeth Scott	
Special Activities:	Jan Howley	

POSTAL ADDRESS : **P.O.Box 505, BANKSTOWN, N.S.W., 2200, AUSTRALIA.**

ENQUIRIES 24 Hrs : Meeting Details, Membership, No magazine
Answering Service: (02) 958-2709

MEMBERSHIP : $15 Joining Fee,
$30 per Year, Subscription.
Group Membership is available for Special Interest Groups, and other Apple Users Groups. Contact the Membership Convenor for details.

GROUP MEETINGS: 6.30 p.m.- 1st.& 2nd. MONDAY of each month (except public hols) at;
The UNIVERSITY of SYDNEY,
Stephen Roberts Theatre

BULLETIN BOARDS: (24 Hours Access)
Macintosh: 439-6142
Apple // , GS: 449-7798
300-2400 Baud, CCITT, 8 Bit, 1 Stop Bit, No Parity.
Password at LOGON.

Bulk Purchase/Library: Answering Service: (02) 681-3661
(See the latest listing of Public Domain disks throughout, and BulkPurchase specials at the rear of the magazine)

General Meeting Format

6:00 - 6:30pm - Members Bulk Purchase Store is open
6:30 - 7:30pm - Announcements, Q & A , Disk Demo
7:30 - 8:00pm - Refreshments and Socialising
8:00 - 8:50pm - Main Meeting with Guest Speaker and Demonstrations

Please Note the NEW Mac BBS Number -

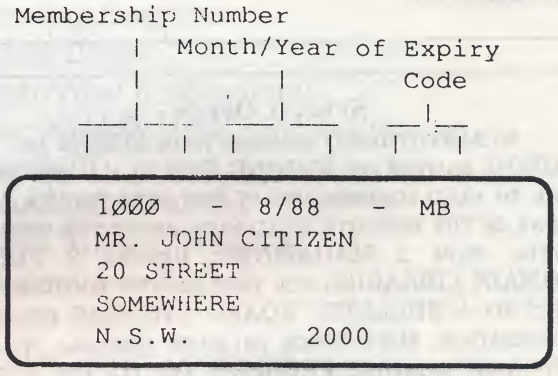
439-6142

Special Interest Groups

Meet at various rooms in the Carslaw Building.
Please ask at the main meeting for details.

An agenda of meetings is not available, as these are free-form and depend on members interest and attendance.

Most members will be used to seeing this little label on their envelope. Please have a good look at it, as it provides some useful information regarding your current membership status!



Joining and renewing can be done using your Bankcard/Mastercard by phoning (02) 958-2709 and leaving your details with the answering service!

Phone Service Directory

Apple //		At Home
General / Games	John Paske	(02) 524-3642
General	Godfrey Gamble	(02) 449-1165
General	Michael Hickey	(049) 67-6616
Applesoft	Colin Rutherford	(02) 520-0926
Educational programs	Helen Colquhoun	(02) 579-2419
		(Bus)(02) 570-5411
CP/M-Z80 cards	Ferg Brand	(02) 427-2358
Technical Programming	Richard Bennett	To be advised
Programming/ IIGS General	Chris Nelligan	(02) 484 2230
Bulletin Board	Cameron Brawn	(02) 449 5530
G.E.O.S.	Graham Clarke	(02) 958 2710

Macintosh		At Home
General/Drawing	Jan Howley	(02) 953 3624
General	Rob Russell	
Word/Multiplan/File	Steve Hill	(02) 869-1454
General/Excel/Comms	Michael Bannigan	(02) 427-3640
Excel/Multiplan	Bob Lafreniere	(02) 427-3707
Music	Ron Lombardo	(02) 30-6314
Omnis 3	Richard Ure	(02) 868-3778
Programming	Paul Maynard	(02) 681-1752
Scientific Applications	Alan Todhunter	(02) 637-6775
4D/Bus/Scientific	Ricky Patten	(02) 358-3748
Drafting/Plotting	Hans Hoffman	(02) 523-1412
Excel/Word	Arie Havenaar	(02) 520 7892

LOCAL AREA CONTACTS:

Sunshine Coast (Mac)	Larry Gibson	(071) 91-3194
Central Coast (Apple)	Kerry Lofthouse	(043) 53-1237
AUSOM (Apple/Mac)	Alex McKenna	(03) 772-5891

After hours numbers please phone only between 6 & 9 p.m.
To be included in this phone register, please write to the editor giving Topics,Name,Phone(am,pm)

24Hr. SERVICE PHONE NUMBERS:
Bulk Purchases & delays (02) 681-3661
Meeting Venues/Membership/No Magazine (02) 958-2709

An AUG (Sydney) Resource 'Phone Service' is staffed with members who have volunteered their services. They will answer your questions to the best of their ability.

If you are interested in helping others about a particular topic, please drop us a line with your name, phone number, and topic of interest. Thanks to those who have volunteered.

SPECIAL OFFER -

TO AUG (SYDNEY) MEMBERS FROM AUSOM INC.

AUSOM WAIVERS ITS JOINING FEE TO ALL WHO WOULD LIKE TO HOLD MEMBERSHIPS IN TWO USER GROUPS. JUST THINK OF THE BENEFITS: READ MORE ABOUT THE WORLD OF APPLE FROM 2 MAGAZINES; BROWSE 2 PUBLIC DOMAIN LIBRARIES FOR THAT ELUSIVE ROUTINE: CONNECT TO 4 BULLETIN BOARD SYSTEMS FOR MORE INFORMATION. HAVE TWICE AS MANY MEMBERS TO HELP WITH THAT ANNOYING PROBLEM AND ALL FOR A YEAR'S SUBSCRIPTION OF $25.

PLEASE SEND YOUR APPLICATION TO:
AUSOM INC. P.O. BOX 49 BURWOOD VIC 3125

PLEASE INCLUDE YOUR NAME, ADDRESS, AND AUG(SYDNEY) MEMBERSHIP NUMBER. PAY WITH CREDIT CARD CASH OR CHEQUE, OR CALL (03) 772 5891 AND USE YOUR CREDIT CARD.

Don't Miss Our

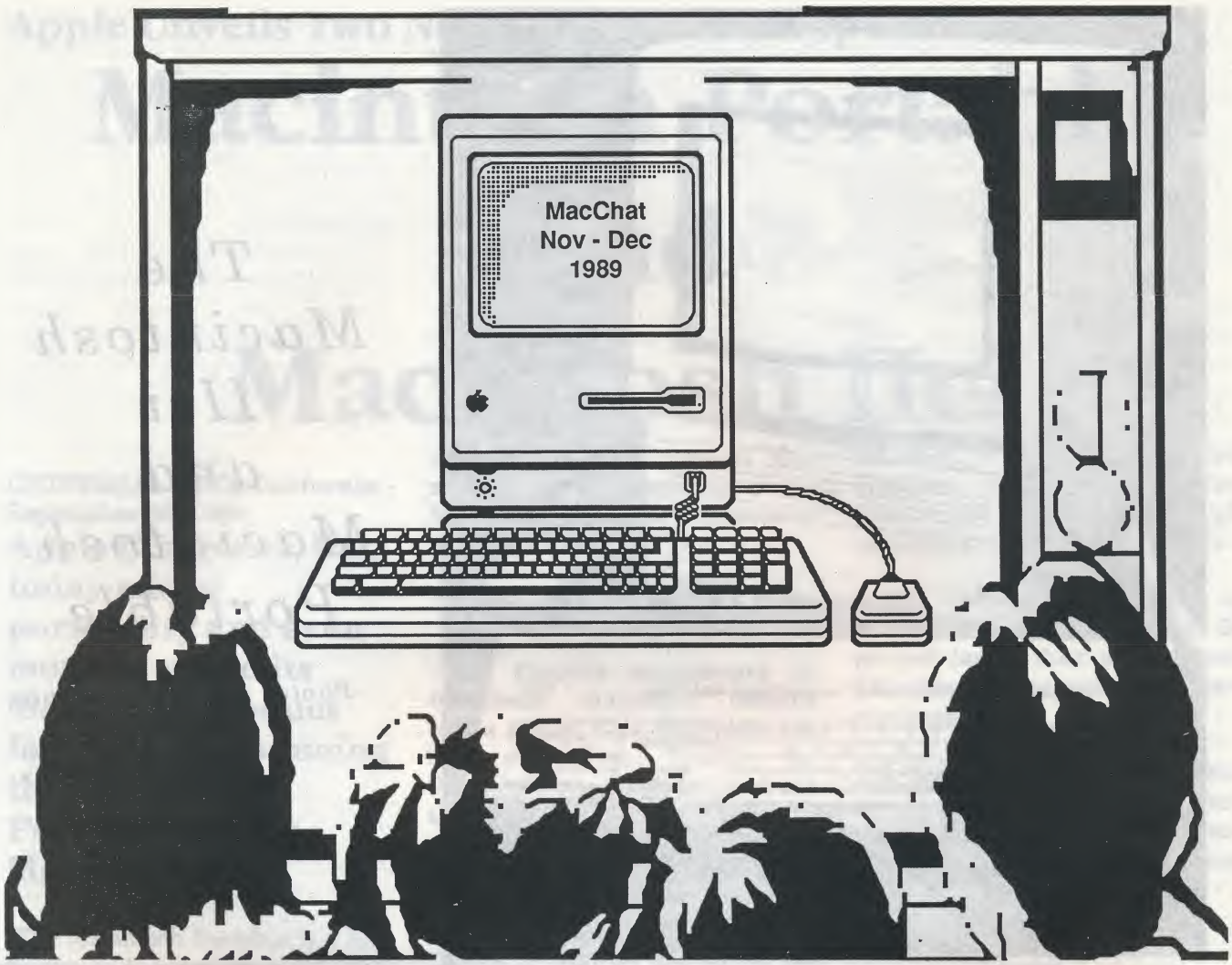
Special Offer

on Disks available at our stand at the MACWORLD EXPO

DO YOU BELONG TO ANOTHER APPLE USER GROUP?

IF YOUR GROUP IS TOO SMALL FOR ITS OWN MAGAZINE, THEN WHY NOT MAKE AN ANNOUNCEMENT FOR NEW MEMBERS IN 'APPLECATIONS.'

SEND THE EDITOR AN ARTICLE ABOUT YOUR GROUP, FOR INCLUSION IN THE NEXT ISSUE.



Mac articles November - December 1989

Mac Portable & IIci	6	Timbuktu?	49
Cross License Agreement	11	Moofing Dogcows	50
Claris CAD review	13	DA & Data	51
Sticky Business	18	MathView Professional	54
A Guided Tour of the BBS	21	Claris CAD - first impression	57
CK. a review	25	HandOff	58
RSG - Complaint	29	Standards Wanted	59
Profile - Arie Havenaar	30	Right Margin Marker	60
Print-Merge Data files	31	Modem or a Radio?	61
OZWindow	35	Laser Printer	62
Update System Icons	36	Protect your Derriere	63
Mac - Name Tags	37	Runx Reports	64
The Editor says	38	MacDraw Crash	68
More on Modems	40	The Macintosh Way	69
A Look at Fonts	41	Computer Jargon	70
Utility-izing your Mac	43	Mac Fun Quiz	75
DIY	45	PC software on a Mac	77
Mac HD problems?	47	Student Bloopers	78
Nisus Q & A	48	Giving up the Mouse	80

The Macintosh IIci and Macintosh Portable

Photos courtesy of Apple

Apple Unveils Two New Macintosh Computers -

Macintosh Portable and Macintosh IIci

UNIVERSAL CITY, California - September 20, 1989

Apple Computer, Inc. today added portability and even more power to its Macintosh product family by announcing the Macintosh Portable and the Macintosh IIci.

The Macintosh Portable is a full-function Macintosh in a portable design.

The Macintosh IIci is a high-performance version of Apple's popular Macintosh IIcx.

Running at 25 MHz and offering new capabilities such as built-in video, the Macintosh IIci is the most powerful Macintosh that Apple has ever developed.

"With this announcement, Macintosh becomes the only comprehensive product family in the industry to offer users consistent personal computing," said Jean-Louis Gassee, president of Apple Products. "This means all Macintosh customers have a sweeping range of hardware and application choices--and they're all based on a single, unified software architecture. Perhaps most important, it means that more and more people can find a Macintosh to fit their individual needs."

Macintosh Portable

The Portable incorporates all traditional Macintosh benefits into a system that customers can take with them. Notably, the Portable features advanced screen technology, sophisticated power management, all-in-one design, and complete Macintosh compatibility.

"When we started developing the Macintosh Portable, we set two design challenges: First, it had to be a complete Macintosh; Second, it had to be truly portable." said Gassee.
"This meant no compromises. And it required integrating innovative display and power technologies. Our new Portable meets those design criteria: it's a Macintosh through and through. Now our customers can have Macintosh personal computing anywhere."

Advanced screen technology

The Portable uses state-of-the-art Active Matrix Liquid Crystal Display technology to achieve the superior graphic capabilities of the Macintosh. This technology enables the Portable to depict the Macintosh graphical user interface, as well as sophisticated graphics, text, and animation with a fast response time, high contrast, and wide viewing angle.

The Portable's display size is 640-by-400 pixels, which is 50 percent larger than a Macintosh SE screen and as wide as a letter-size page.

The system also features a video output port. This port can be used with an adapter to drive external monitors, projection video systems or overhead viewplates.

Portability

Macintosh portability is achieved through sophisticated power management circuitry and an all-in-one design. The system's power management components include -

Motorola CMOS 68000 - Apple chose the CMOS (complementary metal oxide silicon) 68000 microprocessor from the same Motorola family of micro- processors as those found in all Macintosh personal computers. The CMOS 68000 requires 80 percent less power than standard technology chips. It runs at 16 MHz, providing roughly twice the performance of the Macintosh SE.

Low-power-consumption RAM The Macintosh Portable contains 1MB of static RAM, which

consumes less power than standard dynamic RAM (DRAM). It allows users to work for long periods between battery charges and retains the contents of memory when the system is in sleep mode.

Lead acid batteries

The Portable uses lead acid batteries, which last from 6 to 12 hours (depending on usage and configuration) and can be recharged to full capacity at any time. The voltage of a lead acid battery diminishes gradually as power is used, enabling the computer to provide users with information about the power level. A battery Desk Accessory shows a meter that indicates the charge level left in the battery, much like a fuel gauge. Messages alert users when power is running low.

Separate power management microprocessor

This dedicated microprocessor monitors the activity of each component of the Portable. The Power Manager optimizes power allocation and automatically puts the system into a standby "rest" mode or into a "sleep" mode if the system has been inactive for a preset period as specified by the user. During the rest mode the system operating speed decreases from 16 MHz to 1 MHz. In the sleep mode the power to most components is turned off. Memory contents are retained in both rest and sleep modes. The Portable's Instant-On feature allows customers to wake up the system by simply pressing any key on the keyboard.

The following features comprise the system's all-in-one design -

Integrated pointindevices

The system's integrated trackball and full-size keyboard make it easier for customers to set-up, pack-up, configure and use. The system's trackball can be positioned for left- or right-handed users. It can also be replaced by a numeric keypad. The Portable can also be used with a low-power mouse that is included with the system.

Rugged design

The Macintosh Portable is constructed to withstand the bumps and bangs of everyday use. It is made of rugged polycarbonate plastic, a material also used in motorcycle helmets. SuperDrive floppy disk drive and the optional 40MB hard disk are specially designed to ensure durability. - System expansion: The Portable has expansion connectors for additional RAM and ROM. It also has a connector for an internal modem. Apple today also introduced the Macintosh Portable Data Modem 2400, a 2400-baud internal modem that facilitates communication with other personal computers, minicomputers and mainframes, while maintaining low-power consumption.

The Portable's Processor Direct Slot (PDS) is a high-performance slot connected to the microprocessor bus that will support an expansion card. It allows third-party developers to create add-on products to extend the capabilities of the Portable. It's a Macintosh

The new Portable achieves compatibility with Macintosh hardware and software by integrating the following features: Macintosh software compatibility: The Portable works with the same thousands of powerful, easy-to-learn software products that have been written for all other Macintosh computers.

The Portable uses Macintosh system software version 6.0.4. This is a hardware-support upgrade and is compatible with previous releases of Macintosh system software.

Optional 40MB hard disk:

. This special low-power internal hard disk is factory-installed with System 6.0.4 and HyperCard 1.2.5, further simplifying setup for the user.

SuperDrive

The Portable includes the 1.4MB SuperDrive, which provides 75 percent more storage capacity than 800K drives, and reads, writes, and formats Macintosh, OS/2, MS-DOS, and ProDOS disks.

Standard Macintosh ports:

Seven external ports accommodate peripherals such as hard disks, printers and input devices. The Portable's serial ports provide LocalTalk support, which allows the Portable to connect to a LocalTalk network and take advantage of AppleTalk Network services such as AppleShare servers, LaserWriter printers and other devices.

Apple Stereo Sound capability

The Portable features the same high-quality digital sound capabilities as found in the Macintosh modular line and in the SE/30.

The Macintosh Portable comes standard with 1MB of RAM and SuperDrive and weighs 15.7 pounds with the battery and optional 40MB hard disk. Without the hard disk, the Portable weighs 13.7 pounds. It also features an optional mouse, handy pocket reference guide and durable carrying case.

Related products

Apple is also offering several other related products and accessories for the Portable, including the Macintosh Portable Data Modem 2400, Rechargeable Battery, Battery Charger, Numeric Keypad Module, and 1MB Memory Expansion Kit. Also available from Apple are the Macintosh Portable Internal SuperDrive and Internal 40SC

Hard Disk. Apple plans to announce the availability of the Macintosh Portable Video Adapter at a later date.

Apple expects the Portable to appeal to a broad range of customers across all application areas.

Macintosh IIci

The new Macintosh IIci is the highest performance personal computer that Apple has ever shipped.

It delivers up to a 55 percent performance increase, when compared to the Macintosh IIcx and IIx. Additionally, it offers new capabilities--such as built-in video--and incorporates the same flexible design and hardware features as the popular Macintosh IIcx.

"We define performance in human terms," said Gassee. "A truly powerful system is responsive, makes people better at what they do and is enduring. As the Macintosh IIci demonstrates, real performance doesn't come from just raw processing power. It comes from the balanced integration of hardware, peripherals, system software and the human interface."

Performance

The Macintosh IIci computer's higher performance derives from a balanced system design, which features a faster microprocessor and performance enhancements that optimize the microprocessor's capabilities. The combination of these features enables the entire range of Macintosh applications to calculate, reformat, enlarge, scan, search, resize, scroll, redraw and paint faster than any Macintosh has ever been able to do before. Additionally, the system features a connector for a cache card, which can further boost the overall throughput of the system.

Faster clock speed

Motorola 25 MHz 68030 and 68882. The combination of the 68030 microprocessor and the 68882 floating-point coprocessor running at 25 MHz represents the most significant new feature of the Macintosh IIci. (The Macintosh IIcx and IIx run at 16 MHz.)

Burst-mode RAM access

The burst-mode RAM access capability of the 68030 allows the microprocessor to read blocks of memory more efficiently than in previous architectures. As a result, the system requires fewer clock cycles to process groups of instructions, further accelerating the system's performance.

Faster DRAM:

The system uses 80 nanosecond DRAM to match the increase in the microprocessor's clock speed and burst-mode RAM access. Additionally, the ROM code takes full advantage of the 68030's 256-byte instruction cache.

RAM cache connector

The system's built-in cache connector provides users with the ability to install a cache card that can increase performance by storing the most-recently accessed data and instructions in a small bank of high-speed memory.

The microprocessor can read data and instructions from the cache in fewer clock cycles than it can read from main memory. A cache card can improve the performance of a system by up to an additional 30 percent (for a 75 percent overall increase) in performance, depending on the configuration and usage. Apple plans to announce a RAM cache card in early 1990.

Built-in video

The Macintosh IIci computer's built-in video capability lets users connect a monitor to the system without using a video card. The built-in video drives a 640-by-480-pixel screen, such as the AppleColor High-Resolution RGB Monitor or Apple High-Resolution Monochrome Monitor, at up to 256 colors or gray levels, or a 640-by-870-pixel screen, such as Apple's Portrait Display, at up to 16 gray levels.

Built-in video for the Macintosh IIci is self-configuring. Users simply plug in a video cable to the video port. Built-in video also increases the expansion capabilities of the system by freeing up a NuBus slot.

ADDITIONAL FEATURES

512K of ROM

The Macintosh IIci features 512K of ROM, which provides support for the new hardware features (built-in video, burst-mode RAM access, optional cache) in the Macintosh IIci, and for 32-bit addressing. When used with System 7, Apple's next major release of Macintosh system software, the Macintosh IIci will be able to address up to 4 gigabytes (4 billion bytes) of memory. The ROM also includes support for 32-Bit QuickDraw, enabling color systems to display up to 16 million colors simultaneously with the appropriate graphics card support.

IIcx design:

The Macintosh IIci shares the same flexible design as the Macintosh IIcx. It has a small footprint, can be set vertically or horizontally and it is designed for easy serviceability. It also has the auto- restart and low noise features of the IIcx.

The hardware features that the Macintosh IIci shares with the IIcx include three NuBus slots, 1MB to 8MB (up to 32MB with future memory chips), Apple Stereo Sound capabilities, the

internal SuperDrive and an internal 3.5-inch hard disk. As with all other 68030-based systems, the microprocessor's built-in Paged Memory Management Unit (PMMU) can be used with A/UX, Apple's UNIX system and with future versions of the Macintosh operating system.

Expansion capabilities

The system also features the same set of external ports as the IIcx, and includes a video connector to support the built-in video. Additionally, by using the Macintosh IIci computer's built-in video capability customers have all three slots available for other cards.

The Macintosh IIci can be configured from 1MB up to 8MB of RAM on the logic board and accommodates either 40MB or 80MB 3.5-inch, half-height hard disks from Apple and larger disks from third parties. The system can also be preconfigured with A/UX.

Each Macintosh IIci includes a mouse, System Software 6.0.4, HyperCard 1.2.5, SuperDrive, and all documentation.

Apple believes the Macintosh IIci will appeal to a broad range of users who want more power.

Upgrades

Macintosh IIcx customers can upgrade their systems with a Macintosh IIci Logic Board Upgrade Kit that consists of the logic board, as well as a bottom case to accommodate the video connector.

The Logic Board Upgrade Kit is scheduled for release later this year.

Macintosh IIci-specific DRAM kits in 1MB and 4MB configurations will be available for customers who want to upgrade their systems.

Price and Availability

All configurations listed below will be available in October, except for the Portable 1MB/ SuperDrive which will be available in November.

Suggested retail prices including tax:

Macintosh Portable

1 MB RAM
SuperDrive
$9,950.00

Macintosh Portable

2 MB RAM
40MB Hard Disk
$11,450.00

Macintosh IIci

1MB RAM
SuperDrive
$9,950.00

Macintosh IIci

2 MB RAM
40MB Hard Disk
$11,350.00

Macintosh IIci

4MB RAM
80MB Hard Disk
$13,950.00

Keyboards for the Macintosh IIci and all other peripherals are sold separately.

Apple, the Apple logo, Macintosh, HyperCard, ProDOS, AppleTalk, AppleShare, LaserWriter and A/UX are registered trademarks of Apple Computer, Inc. SuperDrive, LocalTalk, AppleColor and QuickDraw are trademarks of Apple Computer, Inc. NuBus is a trademark of Texas Instruments. UNIX is a registered trademark of AT&T.

CROSS-LICENSE AGREEMENT

SEPTEMBER 19,1989--
Apple Computer, Inc. and Microsoft Corporation today announced a cross-license agreement for outline font technology and printer software to be standard across the Apple Macintosh and Microsoft OS/2 Presentation manager platforms. Microsoft will license Apple's outline font technology for inclusion in future versions of Microsoft OS/2 Presentation Manager. Apple will license printer software from Microsoft for implementation in future versions of the Apple LaserWriter printer.

The Microsoft printer software incorporates the Apple font format.

Apple's outline font technology was announced in May, 1989, to significantly improve the quality and flexibility of font support for the Macintosh. Now Microsoft will bring this same open font format to OS/2 Presentation Manager, allowing the easy exchange of rich text documents between these two desktop platforms.

"Apple's innovative image font technology is emerging as the foundation for desktop computing in the 1990s," said John Sculley, Apple's chairman and CEO. "Users can now take advantage of this high-quality, standard printing and font solution on the Macintosh and across other key computing environments."

"Apple has really led the way in enhancing the use of font technology in desktop platforms," said Bill Gates, Microsoft Corporation chairman and CEO. "Our establishment of a common font format and common printer software will bring power, flexibility and standardization for screen and printer output to the Macintosh and OS/2 Presentation Manager."

"Scalable font technology is an essential part of the rich graphic environment that will characterize computing in the 1990s," said Jonathan Seybold, president of Seybold Publications and Seminars. "The agreement is probably the most important development in the computer industry this year." Outline Font Technology

The outline font format is an open standard that all hardware, software and font vendors can support. Nearly a dozen leading type vendors and as many software developers have already announced support for this font standard (see attached list). Today's agreement between Apple and Microsoft means that these type vendors will easily be able to support both the Macintosh and OS/2 Presentation Manager. Apple's font technology includes the specifications for a powerful instruction set that controls characters for printing or screen display at low resolution, while preserving excellent quality at high resolution.

Outline fonts are mathematical descriptions of text characters that allow the computer to accurately display text at any size on any screen or printer. Bit-map fonts, widely implemented in current screen output devices, are device- specific and consequently cannot be easily displayed on different devices without severe limitation on memory and flexibility.

Advantages for Applications Software
The outline font format will make it easier for applications to have high-quality output from either the Apple Macintosh or OS/2 Presentation Manager.

Now, users will be able to purchase a single font library for both systems and be assured of the type quality previously available only on dedicated typesetting and publishing systems.

"Many people use WordPerfect to do high-end word processing and desktop publishing on both OS/2 and Macintosh platforms and require high-quality scalable fonts both on screen and in print," said Derrick Shadel, vice president of development, WordPerfect Corporation.

"We welcome standards like this that provide consistency across these platforms and are open to a variety of vendors." Microsoft Printer Software Enables WYSIWYG Documents

A standard outline font format for screen output is one half of the equation for high-quality document production. The second half is the availability of standard printer software that incorporates the same font format as used for screen output. This printer software meets both these criteria.

The printer software is based on source code from Bauer Enterprises of San Jose, California, acquired by Microsoft in July 1989. It is compatible with Adobe PostScript printer language and has enhancements for compatibility with OS/2 Presentation Manager and Macintosh.

The new printer software provides a high-level description of a page to a printer. It accepts input from the host system and translates it into a series of commands describing which pixels of the page to mark with ink. With its support for the outline font format , the new printer software enables creation of sharp text of any size or font type on any printer that uses this software. As a result, what the user sees on the screen is what prints on the page.

Microsoft will sublicense the printer software to third- party OEMs. The Bauer Enterprises printer software was previously licensed to many leading printer vendors, so Microsoft anticipates that the new software will quickly gain acceptance in the printer market.

Availability

The outline font technology announced today will be incorporated into future versions of OS/2 Presentation Manager and Apple Macintosh. Pricing and availability will be announced at a later date.

FONT VENDORS ANNOUNCE SUPPORT FOR OUTLINE FONT FORMAT

The following leading type vendors have announced support for the outline font standard adopted by both Apple Computer, Inc. and Microsoft Corporation -

AGFA Compugraphic
Bigelow & Homes
Bitstream Inc.
Casady & Greene Inc.
International Typeface Corp.
Kingsley/ATF Type
Corporation Letraset USA
Linotype AG
Monotype Corporation
The Font Bureau, Inc.
URW of West Germany

Mark B. Johnson
Developer Technical Support
Apple Computer, Inc.

Microsoft, MS and the Microsoft logo are registered trademarks of Microsoft Corporation. Apple, Macintosh and LaserWriter are registered trademarks of Apple Computer, Inc. PostScript is a registered trademark of Adobe Systems, Inc.

Announcement courtesy
of Run x

IIci, and 6.0.4

A whole day and only one request so far. Before it the momentum builds, following are the new SysEnvirons constants for the Portable, IIci, and keyboards. These will be documented in the October release of Macintosh Technical Note #129.

machineType
envPortable = 8 { Macintosh Portable }
envMacIIci = 9 { Macintosh IIci }
keyBoardType
envPortADBKbd = 6 { Portable Keybaord }
envPortISOADBKbd = 7 { Portable Keybaord (ISO) }
envStdISOADBKbd = 8 { Apple Standard Keyboard (ISO) } envExtISOADBKbd = 9 { Apple Extended Keyboard (ISO) }

In addition, the Apple FTP site now contains a MacWrite file (StuffIt/Binhex) of the 6.0.4 change history. This is of interest to developers and programmers. Look in ~ftp/pub/dts/mac/sys.soft for sys604-upd.hqx.

Hope this helps answer some questions before you need to ask.

Mark B. Johnson
Developer Technical Support - Apple Computer, Inc.

ClarisCAD

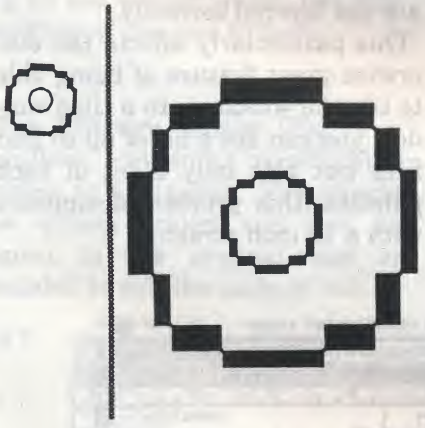
A review by Hans Hoffman

A brilliant addition to the world of the draftsman, and another feather in the Claris cap.

Most of us are aware of the range of software which brought the Macintosh computer to life. They were MacWrite, and Macpaint. Soon after however came MacDraw. This program was to bring about a major change by making the Mac suitable for serious drawing tasks and away from the doodlers.

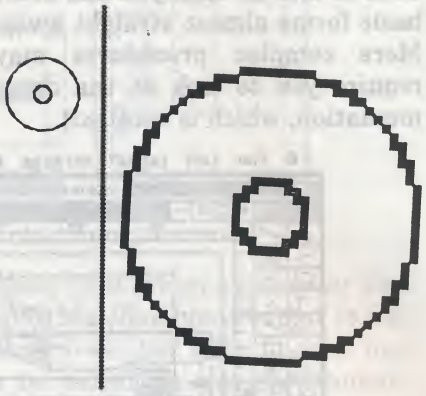
Bit-Mapped
vs
Object-Oriented.

Before I start with a comment on ClarisCAD, I will spend a moment on the difference between Bit-Mapped and Object-Oriented drawing.



The example above shows a circle which has been enlarged.

The first image was created as a Paint file. When stretched to be larger, the appearance changed markedly. This is because the image is made up out of dots, and stored in the computer file as such. When enlarged, extra dots are added.



The second image shows an Object-Oriented circle This circle is really drawn by drawing a line between set coordinates on the screen.

When the circle is enlarged, all that is done is that the coordinates are changed and a new circle drawn.

The effect of this method is not as obvious in such a simple object as it would be if the object were a door for example, or a chair, a person or even a complete building. And these are the kind of techniques employed regularly by a CAD draftsman.

Furthermore, whilst a sketch (painting) is mostly reproduced by a dot-matrix printer, CAD output is generally onto a plotter.

A plotter is a mechanical pen holder which slides in two directions over the paper, reproducing line shapes. For this kind of output device, an object-oriented shape is best suited.

Buying a CAD program

What kind of CAD software should you buy?

This is a question not reserved exclusively for CAD. There is now such a selection of all kinds of software available on the market that it becomes quite a nightmare. Just as though you were buying a refrigerator, or a home stereo, it takes some sorting out.

The following questions you will have to ask yourself;

1. What kind of drawing do you **do** now?

2. What kind of drawing would you **like** to do now?
a) Simple sketches of a design on A4
b) Complex details on A0
c) Simple text notes
d) Glamorous script or display quality wording
e) 3D proposals

3. Is your work independant of others, or do you need to adapt drawings started by other CAD systems.

4. Is drawing the only thing you do, or only a small proportion of your day's work.

5. What kind of output do I offer my customers now?
a) hand sketches on butter paper.
b) A0, or A1 on reproducable transparancy.

These are just some of the questions you should ask yourself before spending any money. It may also be worthwhile to ask the dealer from whom you are buying the software to recommend a customer who uses the particular software package.

If you are only doing small jobs which you will be printing out on the Imagewriter, then maybe MacDraw II will be enough. This program certainly has excellent text handling as well.

If you want to take away the drudgery of the drawing board, doing building details, with structural notes, then PowerDraw would fit the bill.

This is a program which is easy to learn, simple to use and has excellent plotting capability. Text handling is poor, but a great advantage is the built-in Macro language which enables some very neat but complex procedures to be made simple, as well as providing some 3D capability with an auxilliary program.Transfers to and from AutoCAD files is also possible if you really need it.

If fancy drawing techniques are needed, with very good text handling then ClarisCAD will be what you need.

Dreams from the "idd" stable is also a very good CAD program with more emphasis on the graphics DTP side.

There are also quite a few 3D/2D programs available for those who need that capability.
There is also the Mac version of AutoCAD.

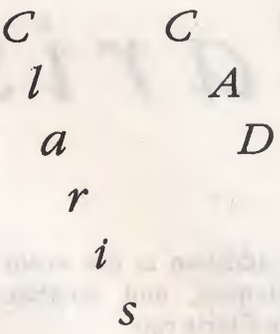
As you can see there is a vast range of programs to choose from. If possible buy a program which does just what you think you will need with room to spare - but not too much.
Remember that complicated tricks will be forgotten soon if you don't use them regularly.

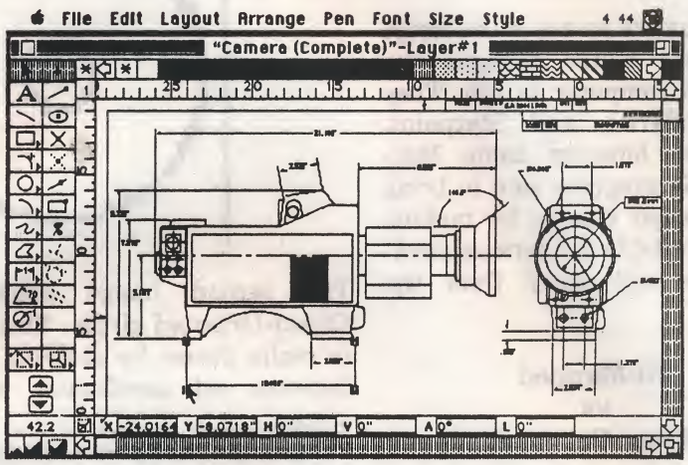
You will also need to look at your equipment carefully. The fancier the program is, the more equipment you will need.
Most CAD programs will not perform in 1Mb, whilst a 20Mb drive is a necessity. Although a large screen is not really needed, you may need the speed of a Mac IIx to work comfortably with some complex programs.

Now for Claris CAD

At first glance the screen resembles the typical Macintosh program, that's a good start. At least we don't have to get used to unusual drawing technicues as is the case with some other programs ported from the IBM world.

The program is quite easy to get used to and as such you can draw basic forms almost straight away. More complex procedures may require you to look at tha documentation, which is excellent.





ClarisCAD is biased towards the large screen user. Most of the tools are placed on screen, with "Modifiers" shown also as icons.

The concept of the "**Modifier**" is very interesting. In most other CAD programs you would draw an object - then go to a menu and link, join, etc

With ClarisCAD this is done by clicking icons in order of operation. It takes a little getting used to, but then is a pleasure to use.

A small disadvantage is that ClarisCAD has the tool palettes as part of the file so that it's possible to press the wrong tool if the files are not layered correctly.
This particularly affects the otherwise great feature of being able to tile the windows. In a tiled window you can see a bit of up to four files but also only a bit of each palettes (this problem disappears with a 19 inch screen).

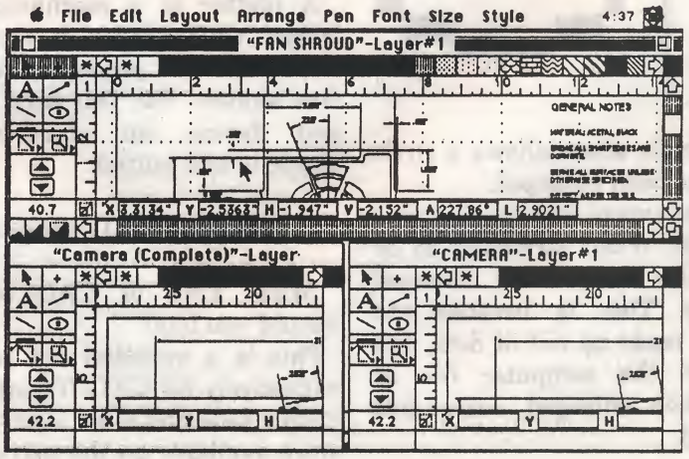
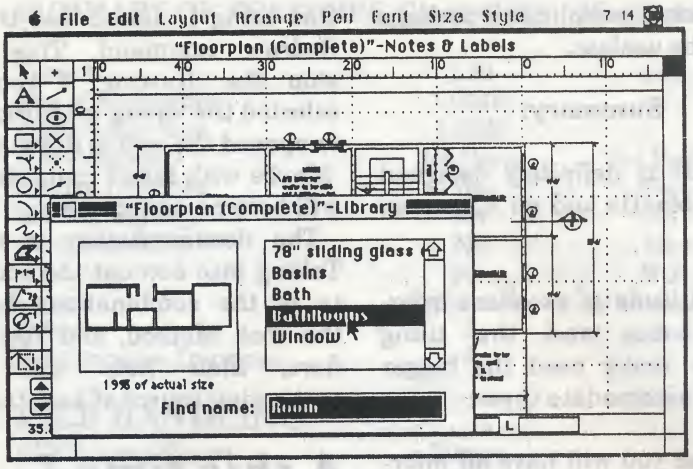


Fig 5.



An interesting **Layers** option is offered by CC. The layers are shown as a book of transparancies, this means that you can see all the layers under the one you are working on, but you can only select objects on the top layer.

As you go up on the stack of layers, you can see more.

Alternatively, by means of the Preferences menu, you can select **Multi-layer**.

This gives you access to all layers which you have made visible. It took me while to get used to this system, as I was used to seeing all the visible layers, but only working on any one of them.

The **Library** feature (Fig 5) is excellent, and works by attaching objects to a drawing. The objects are shown scaled and can be copied in the original size or rescaled to suit the scale.in use.

Again here the small monitor size of my MacPlus made access to the Library window difficult as it has to be called up via the Window selection of the File menu.

It would perhaps have been better to place it in the menu bar at the top.

With my 19 inch monitor at work it would be visible with the Tiled Window mode.

The **Hatches** (Fig 6) offered by CC are extensive, and can be made by the user.

It is possible to make your own to suit your needs and then give each a distinctive name.

The hatch patterns are separate from the fills overcoming a problem faced by some other programs.

Copy-Paste has an alternate paste location which will please many users; an object is pasted at the Click location unless no location was clicked - then the paste is in the original location (over the top of the copied object.

Fig 6

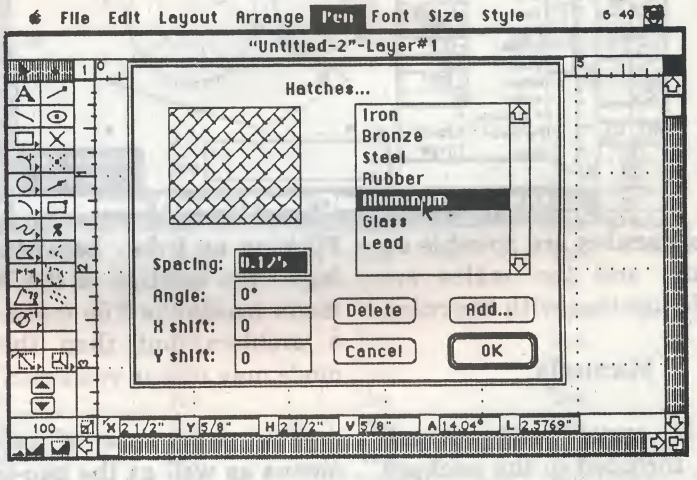
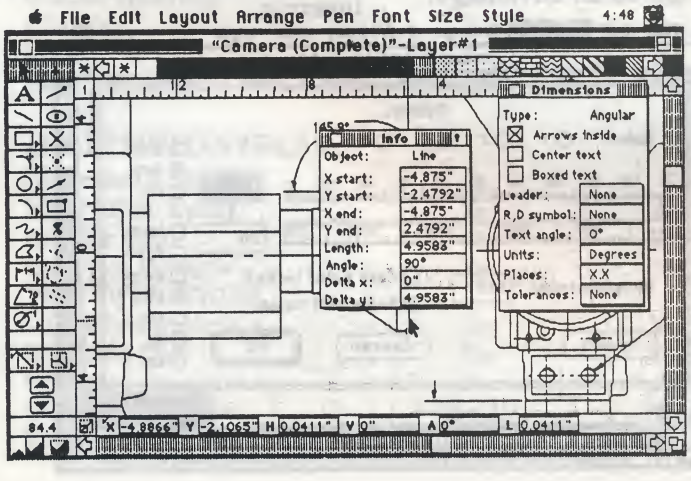


Fig 7



If a new window is opened then the object will appear in the centre of the window.

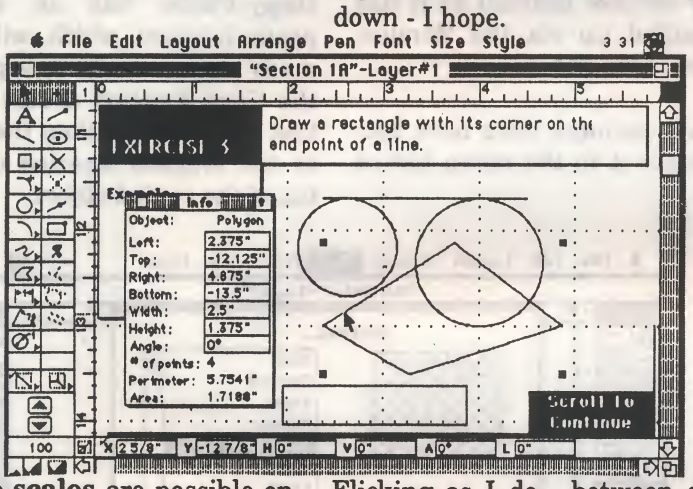
The **Location Bar** at the bottom of the window has some interesting attributes. X and Y show the absolute locations of the pointer, whilst the H,L,A,L indications are from the last Click.

This would help in measuring off a drawing - something I would do often in other packages by drawing a temporary line.

The Location Bar also can also be used to accurately set modifier data, such as the percentage shift, circle radius etc.
This was not easy to use at first and took some examination of the books to understand.

The **Dimensions** box is like a preferences menu, and has made use of all the new sophistication of secondary menus. These open beside.

The **Info** box which provides all the details of any object - or group of objects - can be shown with some or all the available data.



Multiple **scales** are possible on a drawing, and the scales are adjustable together with the ruler

Manuals

ClarisCAD comes with superb manuals. Included in the package is a "Getting Started" book which helps you to set up.

The User's Guide is about 450 pages long with an excellent index. Furthermore you get a Tutorial Workbook which matches the files in the tutorial disk.

It is difficult to think you would need any more, but then there is the Quick Reference booklet as well. I also believe that you can get a video. This wasn't with my review package.
Thankfully missing is a Help file.

With such a complicated package it would be useless.

Summary:

ClarisCAD is definitely designed with the MacIIx and an A3 screen in mind.

The multitude of excellent information boxes and the tiling capability really need the bigger screen to accomodate them.

Otherwise you will have all information and no drawing space.
Fortunately the proliferation of big screens will force their prices down - I hope.

Flicking as I do - between drawings - the location of the Window menu inside the File menu can be a problem, but then the Tiled mode may rescue you again.

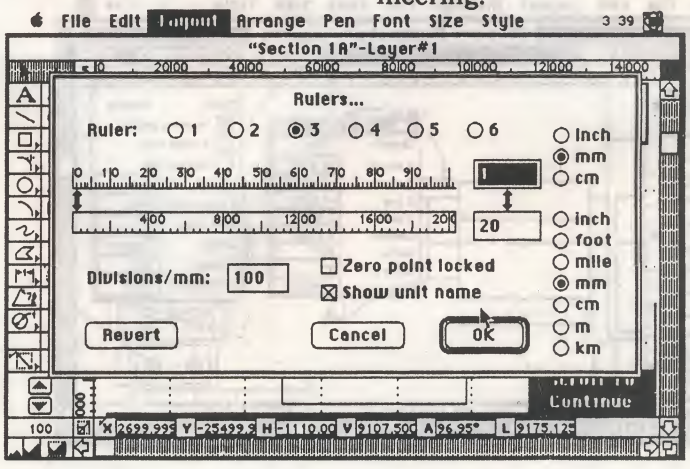
The clever use of secondary menus as well as the pop-up tools saves a lot of extra keystrokes and can be considered an advantage.

One thing I missed was the Kill-Redraw command. This would stop the drawing if you have selected the wrong magnification, or opened the wrong drawing.
Maybe with faster computers this will become unnecessary.

The documentation is superb. Taking into account the complexity of the combinations between the Tool, Method, and Tool Modifiers, their help will be a continuing source of assistance.

A this time I would say that ClarisCAD is by far the best value for money, and a great work tool. The price is around $1200.

A summary of features follows. It compares most useful features of ClarisCAD, MacDraw II, Dreams, and PowerDraw. The features covered are by no means comprehensive, and also only for the current versions. Where features were shown as not available, this was possibly because they were obscure. In all programs you can have work-arounds.
Preview copy by courtesy of Imagineering.



SUMMARY OF FEATURES	ClarisCAD	MacDraw II	Dreams	PowerDraw
Version	1.00	1.00	1.00	2.00
Size of Application	1,064K		852	650K
MultiFinder Size	1350K		768	683K
Plot Program	3rd.Party	3rd.Party	3rd.Party	Internal
Symbol Libraries	Yes	No	No	Yes
Macro Language	No	No	No	Yes
On Screen Help	No	No	Yes	No
Work Log.	No	NO	No	Yes
Layers	Unlimited	Unlimited	Unlimited	256
Colours	8	8	256	15
Simultaneous Drawings	8	8	4	Memory
FILE HANDLING				
DXF Import/Export	Future	-	Future	Separate.App.
PICT Import/Save	Yes	Yes		Yes
Output to 3D	No	No	No	By Macro
Stationery File Size	6K	6K	4K	4K
Test File Comparison	109K		198K	37K
DISPLAY				
Kill Draw	No	No	No	Yes
Zoom	Yes	Yes	Yes	Yes
Zoom Select	Custom	Custom	Yes	2 x
Tile Window	Yes	No	No	No
Keyboard Edit	Yes	No	No	Yes
Select by Object	Yes	Yes	Yes	Yes
Select by Layer	Yes	Yes	Yes	No
Select on all Layers	Yes		No	No
Multiple Scales	By Layer	No	No	As Selected
Drawing Techniques				
Tools	11	12	11	20
Modifiers	18	No	5	No
Align	Yes	Yes	Yes	Yes
Distribute	Yes	Yes	Yes	No
Scale	Yes	Yes	Yes	Yes
Move	No	No	Yes	Yes
Mirror	Yes	No	Yes	Yes
Break into lines	Yes	No	Yes	Yes
Cooky Cutter	No	No	Yes	Yes
Merge Objects	No	No	Yes	Yes
Trim Line	Yes	No	Yes	Yes
Extend Line	Yes	No	Yes	Yes
Replicate	Yes	Yes	Yes	Yes
Line Dashing	6 Cust.	6 Cust.	15 Cust.	9
Custom Hatching	Yes	No	No	When Plotted
Chamfer	Yes	Yes	No	Yes
Fillet	Yes	No	Yes	Yes
Bezier Curves	No	No	Yes	Yes
DIMENSIONING				
Dimension Ends	6	6	10	3
Modify Dim. Ends	Yes	Yes	No	No
Angular Dim.	Yes	Yes	Yes	Yes
Dim. Text movable	Yes	No	Yes	Yes
TEXT OPERATIONS				
Mixed Text in block	Yes	Yes	Yes	No
Clipboard Text	Yes	Yes	Yes	No
Clipboard Operations	Yes	No	No	No
Select on any Layer	Top/All	Yes	Yes	Yes
Rotate Text	Yes	Yes	Yes	Yes

Sticky Business

By Michael Bannigan

Whacko!! At last a *really decent* program to produce labels on BOTH the LaserWriter and the ImageWriter!

I suppose one of the most frustrating jobs is attempting to produce address labels, name tags and similar fiddly sorts of things using data base and word processing programs.

So long as you don't want a long run of labels on the ImageWriter (or if you do want a long run so long as you don't mind the font being Monaco 9 or 12 point), most of the above sorts of programs are, well, sort of alright. But just try to use 12 point New York or Geneva or, worse, mix 12 point and 14 point.

Just watch those labels get all out of kilter as the ImageWriter does what it does so well, and that is space the lines to reflect the different point sizes. By the time label number fifteen is being printed, the labels have crept up or down the printer so that the first line of an address is on the bottom of the label before, or the last line is on the top of the label after the one on which it should have been printed. Result: frustration, bad temper, the dog gets kicked, the kids get sent to bed for making too much noise and the missus won't speak to you for a week.

The final straw for me was when address label files I had set up following the instructions in the Microsoft Word 3.02 manual refused to work using Word 4. This was due mainly to the changes in the page setup specifications in Word 4. Silly little things like this *really* drive me up the wall! I have to say that after consulting my Word 4 manual, I decided that the new setup was not really a giant leap forward as I had to go to yet another menu (Preferences) to specify the paper size.

Generally, I am the sort of person that could be classified as a Word 4 groupie—I really do like the program and I don't run around bitching about what the self-styled purists seem to think is Microsoft's rather liberal interpretation of the Mac interface as, generally, I find the Microsoft implementation no less intuitive than any other. Indeed, it is interesting to note how many Microsoft-invented "conventions" have become the standard.

Consider for example the COMMAND-W instruction for closing a window and COMMAND-N for a new window. These first appeared in Word version 1 (a pretty ordinary program, incidentally, but Word 3.0x changed all that). However, I digress.

For long runs of labels, 100 or more, I used PFS File (yes, really!!) as it used one of the ImageWriter's native fonts in draft mode at 6 lines to the inch, which is the standard for most computer output to a printer. The nice thing about that was that the labels, while hardly a thing of beauty when printed, could be read by the mail sorters at Australia Post and they stayed rock steady in the printer. Result: lots of labels very fast, if in a pretty basic format. The dog was happy. The kids could stay up and you got lots of conversation with the missus (this last development seemed to be a really good reason to try Word 4 again.)

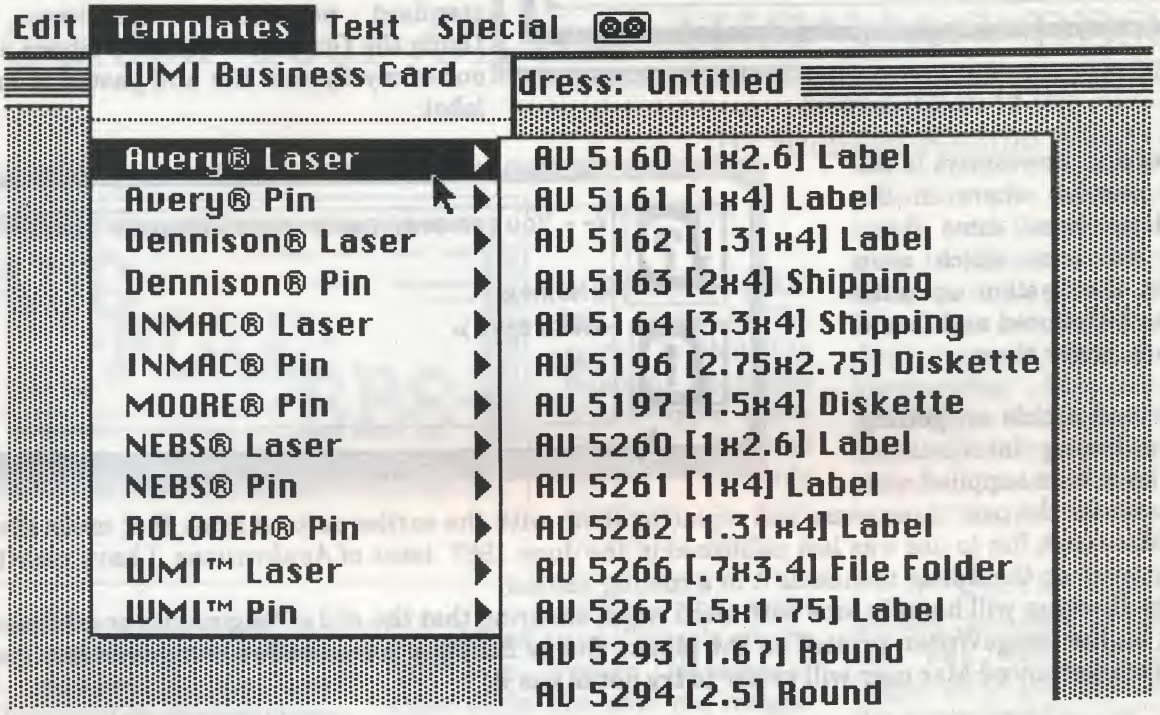
Enter *Sticky Business* version 1.05. Finally someone has heeded the bleating of so many people in the business community who need to produce things like name tags, the sort that fit into those plastic badges, as well as mailing labels.

All you need to do is choose a blank template for the size label you are using, design your label using all the features that the Macintosh is famous for (yes, I know that really ought to be "for which the Macintosh is famous") including different font sizes on each line, bold, italic and all the rest.

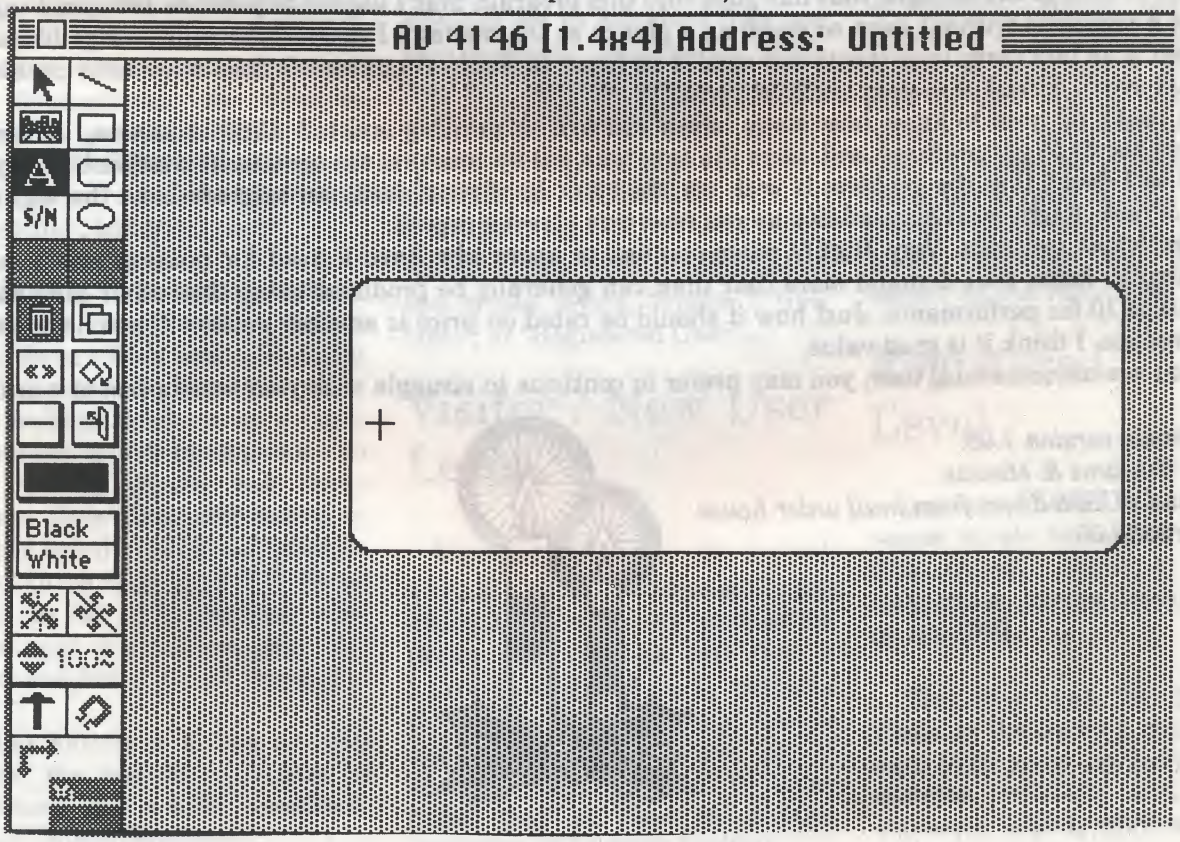
Then, using the print merge option, print your own custom-designed labels using your old Word, MacWrite, Excel or any other print-merge file saved as a *text* file. See elsewhere in this issue for some tips to

help you create a print-merge data file.

When you open *Sticky Business* it presents you with a MacDraw-like environment which enables you to add borders, icons, horizontal and vertical lines to your labels and, using a whole host of other tools, the means to tart up your labels into a really eye-catching presentation. In the screen shot I have selected the standard Avery 1.4" deep x 4" wide continuous label. This is one of more than 120 different pre-defined ImageWriter and LaserWriter labels available in "Sticky Business"—or you can set up your own custom size.



Note the familiar MacDraw or SuperPaint tools, as well as a few new ones:



Using the appropriate tools, you can produce a simple label like the one shown.

And, what is more, you can save the template you have created as something meaningful like "FourLineAddress". Note the different font sizes and styles and the standard print-merge delimiters («...»). Using the *Grab icon* feature I ripped an icon out of my System file and pasted it into the label:

(A Digression: newcomers to the Mac may wonder where in the System those icons came from. They are the ones which were included in the System up until the SE was introduced and I, and many others, prefer them.

My celebrated article on getting rid of the boring international icons that have been supplied with Apple systems for the past three years and replacing them with the earlier cartoon icons that made the 128k and 512k Macs such fun to use was last published in the June 1987 issue of *Applecations*. I have rewritten it and I will prevail on the Editor to include it in a coming edition)

Sticky Business will happily cope with word wrap, ensuring that the end of long names or addresses are not lost or, on the ImageWriter, printed on the platen. *Sticky Business* comes with a comprehensive manual, although the experienced Mac user will prefer to try not to use it.

It is a tribute to the thought that has gone into this program that I used it to produce 100 name tags to be worn at a reception without even so much as a glance at the manual. I created the print merge file using Excel, saved it as text (very important) and used it as input to *Sticky Business* It does have some problems, but they are pretty trivial (a system crash is trivial??).

You really do need to know how many labels you will be printing and tell *Sticky Business,* otherwise the program seems to get confused and takes the easy way out by crashing the system. It crashes both my SE and SE/30 so I doubt that the problem is with my Mac! But be of good cheer, an upgrade is on the way and, with a bit of luck, might even be available as you read this glowing report.

An excellent program. Very Highly recommended to users who have a need for mailing labels, name tags and similar items that demand more flair than can generally be produced using that other computer. I give it 8 out of 10 for performance. Just how it should be rated on price is another matter. If you have lots of labels to produce, I think it is good value.

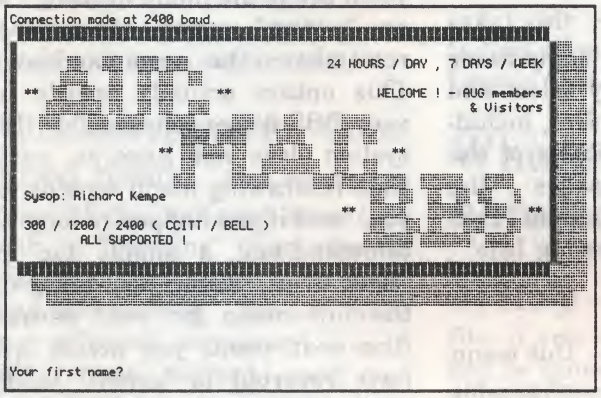
If you are an occasional user, you may prefer to continue to struggle with your word processor or data base.

Sticky Business version 1.05.
Publisher: Williams & Macias
Price: around $US95 direct from mail order house.
Local price $250.00

(02) 439 - 6142

A Guided Tour Of the AUG*MAC*BBS !

Introduction to the BBS (part 2)
By Richard Kempe SYSOP AUG


Connection made at 2400 baud.
24 HOURS / DAY , 7 DAYS / WEEK
WELCOME ! - AUG members & Visitors
AUG MAC BBS
Sysop: Richard Kempe
300 / 1200 / 2400 (CCITT / BELL)
ALL SUPPORTED !
Your first name?

This is the second in a series of articles aimed at introducing A.U.G. members to the "new" MAC*BBS (and its System Operator). For those of you who may not have read the first article in this series ("MAC*BBS History" Oct. Applecations) my aim as "Sysop" of your MAC*BBS is to provide a Bulletin Board Service which is not only accessible and interesting , but also useful.

With this in mind, the boards philosophy requires it to evolve into a form which best serves you - its users and potential users. This evolution will not be a limited process, it will be ongoing - as the UserLog grows, and users express their ideas and needs, so will the board expand and grow, to reflect those ideas, and fulfil those needs (as far as is possible) - the more input it gets from you, the bigger and better it will become!

What follows is a look at BBS access, the current structure of the board, and a brief consideration of "future directions"...

Access

Generally speaking, access to the system is limited to financial members of the Apple Users Group (Sydney) Inc.. The only exception to that limitation being a small group of individuals who might be referred to as "friends of the BBS" (e.g.,, System Operators of other BBSs who offer me reciprocal privileges on their systems - allowing me to download files and gain access to information which may be of interest to you, the user of the AUG*MAC*BBS).

Access Levels

Access to the BBS is achieved at one of two levels, "Visitor / New User", or "Registered User"...

Visitor / New User Level

Visitors (persons who are not already A.U.G. members) are allowed access to the system for fifteen (15) minutes only (per 8 hours) to enable them to evaluate the board. Downloading of files is not permitted, nor is the use of Message Base or E-Mail facilities (other than to leave me E-Mail messages and receive replies).

Visitors who decide to join the A.U.G. (and therefore become eligible to register as users of the BBS, and to enjoy the other advantages of A.U.G. membership) may capture the A.U.G. Membership Application Form available in the Visitor / New User Menu, fill it in and send it off - including remittance of the joining / membership fee.

New Users (those who are already members of the A.U.G., but who have not previously logged on to the MAC*BBS) have the same time / access limitations as Visitors (above) but will be upgraded to full Registered User status on registration (also available in the Visitor / New User Menu). To ensure prompt attention, it would be a good idea to leave me a brief E-Mail message (select "Sysop Mail" in the Main Menu) advising that you have logged on and registered.

Registered User Level

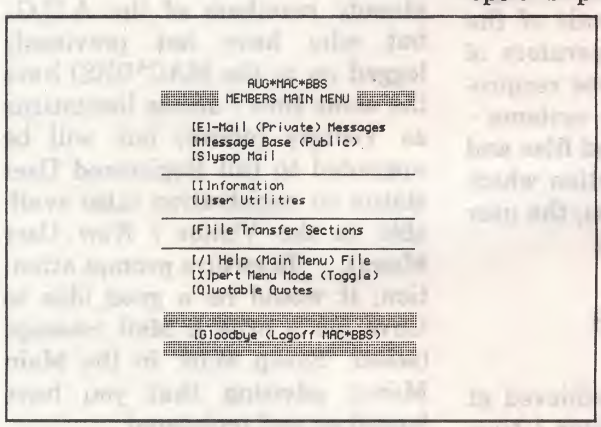
Registered Users have complete access to all Message Areas and File Transfer Sections, and are welcome to use any service offered by the BBS.

The time limit for Registered Users in the Sydney metropolitan area ((02) zone) is forty-five (45) minutes, however, this may be increased to sixty (60) minutes for

country / interstate users, at my discretion. Of course, those who upload files to the BBS are rewarded with an increase in time limit consistent with the time taken to complete the upload (this only applies during the current call).

Structure of the BBS

There are three principal menus within the BBS, namely Main Menu, Message Base, and File Transfer Sections, via which you may gain access to quite a large selection of sub-menus. (Menu descriptions apply to Registered User Level - Visitor / New User Level menus vary slightly)....



Main Menu

This is the first and most important "jumping-off point", from which a number of choices are possible -

[E]-Mail - this takes you to the Electronic Mail (E-Mail) Area, a private message area reserved for the exchange of personal correspondence between users;

[M]essage Base - to the second principal menu - from which 12 sub-menus (public message areas) are available - (see below, and screen dump);

[S]ysop Mail - this is where you leave me a private message (leaving messages via this menu item is the only way you will be assured of a prompt response from me, as I rarely logon under my name - usually as "System Operator");

[I]nformation - this takes you to a menu of the same name from whence you may select and read a variety of text files, including "A.U.G. Info" , "Rules of the BBS", System messages , the "BBS Bulletin" , "Discount Purchases" , "News & Meeting Info" , etc.;

[U]ser Utilities - this menu contains some user-configurable options plus commands to view the BBSs "UserLog" (a listing of all the systems users) and "CallerLog" (a listing of users who have called the board in the past day or so , and what they got up to!);

[F]ile TransferSections - the third principal menu , from which you may access 19 submenus (18 file transfer sections) - (see below, and screen dump);

[/] Help File - this text file deals specifically with Main Menu - the other principal menus each have their own (it may be referred to simply as "Help" but the appropriate version of this file will always be reached via the same command-key [/]) . The information contained in these "Help" files is fairly basic, and is really aimed at the novice, but PLEASE ensure that you read each one, and understand its contents - then if you run into any situation that isn't covered, just leave me an E-Mail "distress call"!

[X]pert Menu Mode (Toggle) - this enables you to toggle back and forth between "full menu" mode and "expert menu" mode - in the latter all you'll see is the menu heading - as an "expert" you're expected to remember the command-keys! This option actually speeds up your BBS usage considerably (the system does not have to waste time re-drawing menu screens for you) and if you happen to forget a command-key, a simple tap on "Return" or "Enter" will bring up the full menu for your perusal (the next menu you access will have reverted to "expert" mode, unless you go back to Main Menu, and toggle the option off);

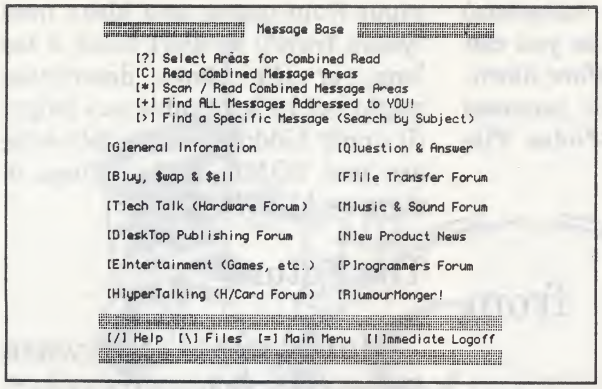
[Q]uotable Quotes - this command will display a random selection from the BBSs "Quote" file (as seen during the logon procedure) - you can just sit there and go through the whole file if you like, but it'll take you quite a while!!

[G]oodbye (Logoff MAC*BBS) - fairly obvious! You'll get one chance to change your mind (just in case you hit the wrong key) and then the system will log you off.

Message Base

Details regarding the type of material to be posted in each of the 12 Message Areas are listed in the Message Base [/] Help file - please consult it if you are in ANY doubt as to which area your message should be posted in.

The commands at the top of the


Message Base
[?] Select Areas for Combined Read
[C] Read Combined Message Areas
[*] Scan / Read Combined Message Areas
[+] Find ALL Messages Addressed to YOU!
[>] Find a Specific Message (Search by Subject)
[G]eneral Information
[Q]uestion & Answer
[B]uy, $wap & $ell
[F]ile Transfer Forum
[T]ech Talk (Hardware Forum)
[M]usic & Sound Forum
[D]eskTop Publishing Forum
[N]ew Product News
[E]ntertainment (Games, etc.)
[P]rogrammers Forum
[H]yperTalking (H/Card Forum)
[R]umourMonger!
[/] Help [\] Files [=] Main Menu [I]mmediate Logoff

Message Base menu could possibly do with some explanation :

[?] Select Areas for Combined Read

- this allows you to select the message areas you wish to "combine" (from the 12 available) for subsequent scanning &/or reading. You can make your selection permanent (i.e., it will remain current until you change it) or temporary (only applicable to the current call) ;

[C] Read Combined Message Areas

- you will be presented with a standard message area menu - choices you make will apply to the selection you made under the previous command;

[*] Scan / Read Combined Message Areas

- this allows you to scan through the message areas you combined (only the message headers are displayed) but also gives the option to stop and read specific messages;

[+] Find ALL Messages Addressed to YOU!

- similar to the message search done at logon (to notify you concerning any new mail - mail you've received since your last call) but this command will search all message areas, public and private, for ALL messages addressed to you;

[>] Find a specific message (search by subject)

- this command searches only the areas you have chosen to combine, for a word or words in the "header" (subject) of a message - e.g., if you wanted to find all messages with the word "Apple" included in the header.

Where to from here?.....

[/] Help

- will invoke the Help file, if you wish to refer to it - it can be cancelled at any time with a CTRL-C if you don't wish to read it all;

[\] Files

- this will take you directly to the File Transfer Sections menu, without having to return to Main Menu;

[=] Main Menu

- again, fairly obvious;

[I]mmediate Logoff

- this command will log you off straight away - no second chance, you're GONE!

File Transfer Sections

A wide range of files are available, from approximately 20 sub-menus (though it's hard to keep track , as the number's increasing all the time!). Files are , of course, allocated to sections according to type (as you can see from the screen dump).

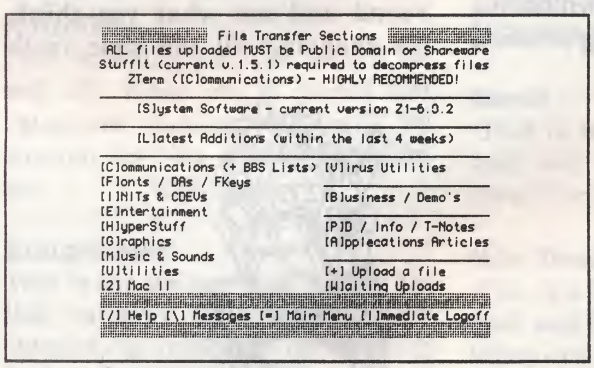
There are perhaps one or two file sections of which special mention should be made , as their existence may not be immediately apparent to the casual observer :

Australian BBS Listings

accessed via the [C]ommunications File Section menu, this sub-menu facilitates online reading of BBS Listings , compiled by the Australian BBS Registry , which cover all Australian states and territories ; linked to this menu is another sub-menu , which provides for the downloading of any of the above BBS Listings individually, or all eight , archived together in one file ;

Graphics

- having a "Graphics" File Section is not new, of course , but what is not immediately apparent is that the graphics files have now been "subdivided" into separate File Sections , according to type - the new Sections are :



MPNT

- this contains all "paint" type documents , e.g., documents created by such programmes as MacPaint , SuperPaint , FullPaint - even Desk Accessories like DeskPaint which can save files in a "paint" format ;

GIF - (Graphics Interchange Format - a compressed text-type graphics file format) - many of these files are in colour , and look very nice indeed on a Mac II or other machine with a colour display , but they can certainly be viewed on Macs with monochrome displays with great success ; a second GIF File Section (the "Restricted" Section) may be accessed via the main GIF menu - this contains "R-" and "X-Rated" material , for those interested ;

EPSF - (Encapsulated PostScript Files) these are in PostScript format , and are frequently used in DTP work, being supported by the major DTP programmes , e.g., PageMaker, ReadySetGo!, Quark Express , etc.;

PICT (PICT 2) - originally MacDraw format files, but now supported by a number of other programmes (e.g., SuperPaint , PixelDraw, etc.,) ; PICT 2 files can also be displayed in colour ;

TIFF - (Tagged Image File Format) supported by a number of common graphics programmes , e.g., SuperPaint , PixelPaint , Canvas , etc.;

Apple Technical Notes - we now have a fairly good selection of Apples Macintosh Tech. Notes available for downloading (I'm currently attempting to make our "collection" more complete) with an online Index , so you can check the exact title before downloading - this Section is accessed via the PD / Info / T-Notes File Section menu.

Where to from here?.....

Commands at the bottom of the File Transfer Sections menu will take you to :

[/] Help - the Help File for the File Transfers ;

[\] Messages - to Message Base ;

[=] Main Menu - back to Main Menu ; or

[I]mmediate Logoff - logoff - no second chance!

So , that's the "Tour" of the board, hopefully no-one will now get lost - if you do , there's ALWAYS an exit to Main Menu handy , and there's usually also one available to return to the princpal menu that you last "branched" from , and you'll find a [/] Help file there somewhere that will probably get you out of trouble!

If you haven't logged on before, by all means do so - have a look 'round and see what you think. It's changing all the time (with input from users, and ideas from "yours truly") so don't leave it too long, or the above description might not be applicable any longer (!) - only kidding. The following are just SOME of the things in store on AUG*MAC*BBS.

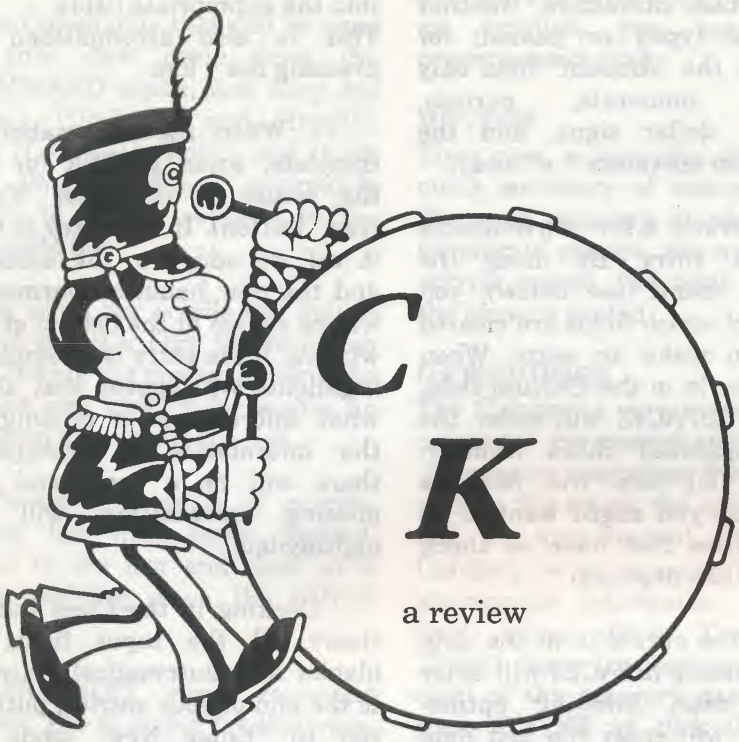
The Future -

Hardware / Software Support "Mini-Boards"! - in the very near future , there will be a completely new service offered to you. Local hardware and software companies (with names that are familiar to you all!) will be running product support "Mini-Boards" on AUG*MAC*BBS. These will consist of : a Message Area - for direct customer access , and a File Section - for the up- and downloading of software upgrades!

Networking - just as soon as we can obtain a "Network Mailing Application", the board will be joining a national network (probably FIDOnet) so that we can offer you a wide variety of nation-wide conferences - who knows, maybe we can even run to an international conference or two? (EchoMac???)

To be continued.....
Next month - "Using Your BBS!"

Richard Kempe (Sysop)



CK is an easy-to-use program that accomplishes a common task: keeping a categorized account. A CK document contains the following information:

CATEGORIES

These are the different classes into which income and outgo are separated. The maximum number of categories you can have is about 32,000 , but practically that number is limited by available memory. Unless you have only a 128K Mac, you should be able to use about 100-200 categories.
Each category contains the following information-

Name
Up to 16 characters.

Type
Either a credit or debit. For example, in a checkbook account, deposits are credits and checks are debits.

Auto-Payee
This is an optional feature. An auto-payee is a text string of up to 90 characters.

Say in your checkbook account you had a debit category named RENT. Since rent is always payed to the same person, it's a pain to have to type in the same name every time you make a rent entry. An auto-payee let's you specify some text to appear automatically for entries of that category.

Auto-Amount
This is similar to an auto-payee, but it's a dollar amount.

Auto-ON
This is a flag you can switch on and off. When on, it means the categories auto-amount will be entered for you when you select an auto-payee.

Budget-Amt
This is the amount you budget for that category for 1 month. This amount is used in generating Budget Reports (see below).

Budget-ON
This is a flag determines if a category appears on Budgets Reports.

ENTRIES
Entries contain the actual amounts entered into a CK account. The maximum number for one account is about 32,000 , but again the practical maximum is limited by memory. A CK document containing 50 categories and 300 entries takes up about 56K - a little tight in a 128K Mac, but no problem for Fat Macs and beyond.
Each entry contains the following information-

Payee
Who (or what) the entry is to or from. This can be filled in with a category's auto-payee.

Check Number
An optional number for your convenience.This could be the check numbers in your checkbook, or anything you wish. The maximum value is 9999.

Date
Every entry must have a date. It's format is MM/DD/YY; or it is in the USA. The actual order CK uses is specified by the INTL resource in your System File.

Amount
Every entry must have an amount. The maximum amount for a single entry is $999,999.99.

Memo
This is an optional text field for your own use. Its maximum length is 45 characters.

Non-Taxable/ Deductible
This is a flag value you can toggle back and forth.
When on, for credit entries it means that entry is marked"Non-taxable" income; for debit entries,

This flag is used when generating Tax Reports (see below)
In addition to this information, each entry possesses two attributes, "Posted" and "Locked". These are explained below.

Using CK

Every CK document opens in its own window. Anything that changes the document occurs in that window. CK windows are opened using the FILE menu commands (New) and (Open), to start new documents and open old ones, respectively.

A single document can only be open in one window at a time.

The (Save) command saves the document in the active window, (Save As) saves it under a new name of your choosing.

A CK window offers 4 VIEWS of your document. The 4 views are
(1) Make Entries
(2) Reconcile
(3) Review
(4) Categories.
The different views are selected by choosing the desired view from the COMMAND menu, or by clicking the cursor in one of the 4 icons at the left of the CK window.

A CK window opened using the (New) command opens showing the Categories view; a window opened using (Open) opens showing the Entries view.

MAKE ENTRIES
This is where you enter new credits and debits, or edit old ones, in a CK account.

Type the appropriate information in each box. Pressing TAB moves the cursor down to the next field, Shift-TAB moves it up. Text can be cut, copied, and pasted in between fields, or from desk accesories. Each field accepts they are typed or pasted; for example, the "Amount" field only accepts numerals, periods, commas, dollar signs, and the calculation operators * + - and /.

CK provides a few conveniences for data entry. By using the Defaults menu (see below), you can select which fields are cleared after you make an entry. When the cursor is in the CkNum field, pressing [SPACE] will enter the next sequential check number; pressing [-] sets the field to dashes, as you might want to do with entries that have no check number (like deposits).

When the cursor is in the date field, pressing [SPACE] will enter today's date; pressing option-[SPACE] will enter the last date you used that DID NOT EQUAL today's date.

The "Amount" field can contain a simple calculation. In this field type "0.75*4". Press ENTER to enter a new entry, then scroll back to see the entry you just made. The amount field will contain "$3.00".

Note

In a calculation, the first half of the expression will be read as a dollars value; eg, 75 becomes $75.00. The second half is read as a cents value; eg 3 becomes $0.03. Then, all calculations are done with CENTS amounts. So typing "75*4" gives an answer of $300.00 (7,500¢ * 4¢), while typing "75*0.4" gives an answer of $3000.00 (7,500¢ * 40¢).

Each entry must be associated with a category. To select the category for an entry, highlight with the cursor its name in the scrolling list at the right of the window. Double clicking on a category name will put the category's auto-payee information This is also accomplished by pressing the \ key.

When the information is complete, press ENTER (or use the mouse to click the "Enter New" button). If the entry is OK, it will be added to the account, and the new balance information will be shown at the bottom of the window. If the entry is incomplete, highlights will appear that show what information is missing. If the information is incomplete, there will be a beep, and the missing information will be highlighted.

Clicking in the Clear button clears all the input fields to blanks and automatically scrolls to the end of your entries, putting you in "Enter New" mode. It DOES NOT DELETE any entries or information.

To edit an entry made previously, use the scroll bar to the left of the category list. This will scroll through all entries. You will also see the "Enter New" Button become inactive, and the "Edit Old" Button become active. When you get to the entry you wish to edit, change the information you want to, then click on "Edit Old". Balance information is updated to reflect the changes made by the edit. An entry must be un-locked to be edited.

Entries can also be deleted. To delete an entry, scroll to it as it were to be edited; then select (Delete Entry) from the EDIT menu. A dialog appears to confirm the deletion; to abort, click Cancel. An entry must be un-locked to be deleted.

RECONCILE
This is where you reconcile the balance CK reports for your account and the actual balance reported, for example, by your bank.

The Commands that can be used in this view come from the COMMAND menu, and they are (Post), (Un-Post), and (Toggle), and (Lock), (Un-Lock), and (Lock All Posted). These commands apply to entries selected in the reconcile list.

The scroll bar scrolls the list; to select an entry, click the cursor on it. Clicking the mouse, holding the button and moving the mouse up or down also scrolls the list.

To select a range of entries, select the first entry desired, scroll to the last and click on it while holding down the SHIFT key.

The EDIT menu command (Select All) is active for this view. Entries selected show in inverse video.

NOTE

Entries which have their non-taxable/deductible flag set display a coin icon. This is for your information only, this flag cannot be changed in the Reconcile view.

The commands (Post) and (Un-Post) add or remove entries from the total of those posted. Posted entries display a checkmark. (Toggle) reverses the state of entries; those that are posted become un-posted, and vice versa. Double clicking on a single entry will (Toggle) that entry.

The Lock commands allow you to determine if entries can be modified. Like the Post commands, they operate on selected entries. An entry that has been locked cannot be edited or have its reconcile status changed.

Locking is signified by the padlock icon. The command (Lock All Posted) is provided so that once you have successfully reconciled an account, you can easily preserve your work.

REVIEW

This view is provided to give a quick summary of account data. For each category, it shows the number of entries, the number of entries posted, the total amount, the amount posted.

CATEGORIES

The Categories view is where CK categories are created and edited.

A category comprises three fields of data: the name, the auto-payee, and the auto-amount. To add a Category to an account, type the appropriate information in each field, select either "Credit" or "Debit" from the buttons to the right of the category name, then press ENTER or click the "Add New" button.

The "Auto ON" check box beside the auto-amount determine if the auto-amount is to be used when an auto-payee is activated. For example, RENT is usually paid to the same person every month and in the same amount; for a RENT category, turn on the "Auto On" button. But for PHONE BILL, although the bill is paid to the same person each month, the amount if usually different;for a category of this sort, leave "Auto On" "Off".

To edit a category, double-click on its name in the categories list.

The "Add New" button becomes dim, and the "Change Old" button becomes active.

The credit and debit classification of the category cannot be changed, but all other the information can be. When you have made the changes, click "Change Old".

Categories can also be deleted. To delete a category, double-click on its name as if to edit it; then select (Delete Category) from the EDIT menu. A dialog appears to confirm the deletion; to abort, click Cancel. A category that has any entries in it CANNOT be deleted.

Other Features

(Undo): CK allows you to Undo certain actions. These are:

Entering a New Entry, Creating a New Category, Editing an entry or category, Deleting an entry or category.

If Undo is active, its menu text is changed to (Undo[command]); if it's not possible for CK to Undo, the menu text reads (Can't Undo) and is dimmed.

Selecting (Undo) changes the menu text to (Redo[command]). If you want to Undo, do it quick! Clicking on controls, activating windows, and many menu commands turn off (Undo).

DEFAULTS Menu

This menu let's you change some of the ways CK works. The first 5 menu selections read "Clear" followed by the name of an entry field (payee, cknum, etc). If one of these is active (indicated by a checkmark) whenever you enter a new entry, that field will be cleared to blanks.

Since most entries will have different payees, you'll probably want to clear the payee field after each entry, to save you the effort of deleting the old one before starting a new entry. However, since the dates of entries are often the same, or only changing by a day or so, you'll want to keep the date field so you don't have to re-enter the same date over and over. Selecting the "Clear" items toggles them between on and off.

Auto-Save

This command allows you to set CK so that it saves the active window after a set number of new entries.

Confirm Deletes
This let's you turn off the confirming dialog that appears when you delete a category or an entry. This is useful if you plan to do a lot of "cleaning up" on a file by deleting many entries or categories at once.

Save Defaults
This command saves the defaults currently in force, so that they will appear next time you use CK. The saved defaults belong to the CK application, not to individual CK documents.

Sort
This command is under the FILE menu. (Sort) sorts the entries or catgories of an account. Either can be sorted using up to three keys.

For example, entries are rarely made in their correct date order; (Sort) can arrange them in correct date order. Also, if you have many categories, you may want to (Sort) categories so they are in alphabetical order, with credit categories before debits, or in order of # of entries in a category.

Clone
This command is under the FILE menu. (Clone) creates a new CK document that has the same categories as the currently open document, but has no entries. This allows you to "start over" with the same account structure. For example, to start a new year (or quarter, or month, for that matter) for your checkbook, use (Clone) on your current checkbook.

Search
This command brings up a dialog that let's you search for entries. It works only for the (Make Entries) and (Reconcile) views. Entries can be searched for by text string, amount, date, or check number. In addition, you can restrict the search to entries that have been posted, those not posted, or to all entries. The "string" search option has some special features. First, it looks for a string of text in the payee, the memo, and finally, the category of each entry.

By typing the name of a category (type it EXACTLY, including capitols!), you can search for the next entry in that category. Second, searching for a "null" string (nothing typed) always finds the next entry. Using this, and clicking either "Posted" or "Not Posted", you can search for the next posted or the next unposted entry.

Report
CK can create reports, which are summaries or listings of account data. Reports are saved as TEXT-type files. In addition to allowing you to find out much-needed answers (like, "How much did I spend on shareware in February 1988?"), you can also export CK data to other programs, like spreadsheets, databases, or tax-programs.

Reports are of four kinds-
Entries reports,
Categories reports,
Budget reports
Tax reports.

Each report displays the following type of information-

Entries Report
Current order. Sorted groups entries by category. Running shows a calculated balance after each entry (like a check register)

Categories Report
Shows category totals. In addition, 6666666666666666666 for each category the per cent of total credits or debits that category represents is shown; for debits categories, the per cent of total INCOME that category represents is shown as well. For example, for a debit category RENT, you see the total spent on RENT, what percent that amount is of all you spent, and also what percent that total is of WHAT YOU TOOK IN (total credits).

Budgets Report
Compares monthly totals for categories to the budget amt entered for that category. When generating a budgets report, you must specify a from date and to date. The report will begin with the month of the from date and and with the month of the to date. Even if you specify a day other than the first/last of the month, all the entries for the start/end months are used in calculating the report.

Tax Report
For each category, shows the total non-taxable/taxable, or,deductible/non-deductible.

Please NOTE!! Certain reports end with lines showing "Total Credits", "Total Debits", and "Total". These refer to the totals for that REPORT, not the totals for the entire account!!

The report set-up let's you specify different forms of report; for example you can choose to report on the entire accound, or only a part; the part can be specified by starting and ending dates, check numbers, or entry numbers. (The entry number is the "absolute" number of an entry, its current position in the account. The first entry made in the account is entry number 1, the second is 2, etc. This number is shown for each entry in the Make Entries view.)

You can restict the report to entries which are posted or unposted, and locked or unlocked. You can also choose to restrict a report to certain categories. To do this, click the "Some Categories" button, then highlight the categories of interest in the category list at the right. To select categories at different parts of the list, hold down the Command key as you click on each category.

Reports appear in their own window that can be moved, resized, activated and de-

activated. Only one report window at a time is allowed. Reports are saved as text files that can be opened and manipulated with any word processor.

Reports can also be printed. Printing is done using standard Macintosh commands. Because of their width, 9 pt. are the best Fonts to use when printing Category reports.

TAB DELIMITED

Checking this box in the report setup dialog creates a report of the following format:

[Header] [Return] [Return] Data

For Categories reports the header consists of the text string:

Category Name [TAB] # entries [TAB] total [TAB] %of credits [TAB] % of debits [TAB] % debits/credits

For entries reports the header consists of the text string:

CheckNum [TAB] Date [TAB] Category Name [TAB] Tax Info [TAB] Category # [TAB] Amount [TAB] Payee [TAB] Memo

Since the [Return] character is usually taken to be a record separator, [Return] characters are filtered from the Payee and Memo data and replaced with the string " ... " ([Space] [Ellipsis] [Space]).

This option is provided for exporting CK data to spreadsheet or database.

Differences

As of February 1988, the latest version of CK is 2.0r1. CK 1.53 was released in July 1987, and has so far been the "official" "OK" version. Other versions of CK currently at large include: 1.0, 1.5, 1.51, 1.52, 2.0b1, 2.0b2. CK was first released as version 1.0 in May 1987.

FILE COMPATIBILITY

CK 2.0r1 can read files created by CK 1.53; but the files it saves cannot be read by 1.53. Unfortunately, files saved with 2.0b1 will not work properly with 2.0r1. If you have files created with 2.0b1 or b2 you want to use, please contact the author.

RSG 4.5 COMPLAINTS ....

From Carnegie-Mellon University, CS/RI

Here are a couple more gripes about Ready,Set,Go! 4.5.

RSG 4.5 appears to have SERIOUS problems with any font that doesn't include a width table in its FOND resource. This includes all of the standard Apple fonts except the PostScript screen fonts - Times etc.

Try the following experiment - make a text box, select bold Geneva and type a few words. The way the words shift around is truly remarkable (use the largest size of Geneva you have to make the effect most obvious).

2. Cursor positioning in the text gets very strange. It appears that RSG has forgotten how to calculate widths of modified fonts (bold, extended, condensed) unless the FOND resource tells it how. I also saw some strange behavior with underlined text (like interword space going to zero), but can't reproduce it right now.

Since I don't use PostScript fonts, this problem alone makes 4.5 unusable. Perhaps I could fix it by running all my fonts through Fontastic and creating FOND width tables, but I don't see why RSG should not be expected to cope with out-of-the-box Apple fonts.

2. Chuq mentioned that 4.5 is a tremendous memory hog, but he didn't make it clear that it is also a *disk* hog. Converting a 4.0a RSG document to 4.5 format roughly doubles the disk space occupied by the document. This is for good-size documents (tens of pages), so it's not just a question of somewhat more overhead for font tables. Does Letraset own stock in some disk drive companies?

I'd be willing to accept the resource usage in tradeoff for the new features, but until they fix the font bugs I'm staying with 4.0a.

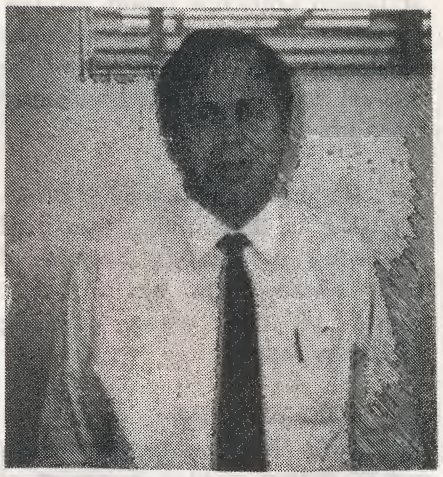
I wish I had my $50+ upgrade charge back. If I had bought 4.5 at full price I'd be REALLY annoyed.

Summary

Version 4.5 sucks

Profile....

Arie Havenaar (AASA CPA JP)



Age: 44

Occupation: Financial Controller/
Company Secretary

Experience: Attended Fort Street Boys High School and due to family reasons left to start work after completing 2nd Year.
Studied for the Intermediate Certificate at Night School then attended Sydney Technical College completing the Accounting Certificate after 5 years part time study. I am an Associate Member of the Australian Society of Accountants with Certified Practising Accountant status in that Body.

Worked in various Accounting positions for a variety of companies including at one stage Secretary and Director of a listed public company in the printing field.

Been responsible for the implementation of 3 mini-computer installations involving Singer System 10, Honeywell Level 6 and Webster Spectrum (DEC PDP Clone) computers. Applications included mainly accounting, production control, estimating and inventory management.

At present I am responsible for systems running on a Webster computer for multi user and branch accounting/inventory management and also use an NEC PC (286) for such things as spreadsheets (Excel is the favourite) word processing, payrolls, assets management
and taxation.

Hobbies and Interests I have served in the Army Reserve for over 21 years in the Royal Australian Engineers finishing as a Lieutenant. I also spent a few years as Group Leader of a local Scout Group.

Skindiving, fishing, camping, bush walking and golf are among my favourite outdoor pursuits.

Computers (particularly application programs) head my indoor past time choice. Usually after a day of slaving over a hot PC I head home and spend a couple of relaxing hours with my Macintosh Plus.
I prefer a Macintosh to a PC as every new application is so easy to learn and install.

I have experience or training, but don't claim to be an expert, in Lotus123, Execuplan, Saturn Calc, Excell and Word (DOS and Macintosh versions), Word Star, Dbase, CPM & Multiplan.

My first home computer was an Apple //+ which I still own, probably for centemental reasons.

I live at Engadine am married and have two children

Many thanks Arie, for your profile. Will we have two new members for the AUG in the very new future ? ED

Creating Print-Merge Data Files

Top Tips from Michael Bannigan

Print-merge data files can be messy to create as you struggle to count the number of commas you need to delimit fields to make sure that the merge doesn't terminate part way through with that "missing field" or similar message.

What doesn't seem to be commonly appreciated is that most word processing programs can use either tab or comma delimited fields, or a combination of both. There a number of ways to make life easier for the frequent creator of merge data files.

1. Microsoft Excel.

Simply create your name and address file to be used as a merge data file in Excel as shown below.

Save it as text and the tabs are inserted automatically while any fields with embedded commas in them (e.g. Level 46, Australia Square) are surrounded, also automatically, with double quotes ("), or rabbit's ears if you prefer.

This tells the word processor when merging the data file into the main document to ignore the comma as a control character and not force a premature termination of the merge.

	A	B	C	D
1	Name	Address1	Address2	Address3
2	Mr Fred Bloggs	Level 46, Australia Square	Sydney 2000	
3	Dr Henry Higgins	"Luverly", Baker Street	London C01 5BX	England

Fig.1

It is important to remember that, if your word processor requires a header line, it should be the first line entered. In fig.1 line one is the header.

After the file has been saved using Excel's text option and opened with Word it appears like this, which is precisely what you want: (I put the tab stops in the ruler at 4 cm, 10 cm and 13.5 cm to aid readability. While it is not necessary, it is not a bad practice to follow.)

Note that when Excel saved the file as a Text file it added the tabs between fields, the double quotes around the fields with commas embedded in them, surrounded the word in double quotes with double quotes and finished the line with a carriage return. Excel takes care of all the messy bits, saving you a lot of work, to say nothing of avoiding premature termination of print-merge jobs. While I havn't tried it, you should be able to create similar files with Microsoft Works using the database or spreadsheet modules—check the manual.

2 Database programs.

Many database programs will let you export files in mail merge format. Before I twigged to how easy it was to create a file using Excel I always used Borland's Reflex Plus (and before that, Reflex). Simply set up the fields you need, enter your data and then export it as a mail merge file.

The illustration in fig.2 shows how Reflex Plus exports the file. After choosing "Export qualified records"

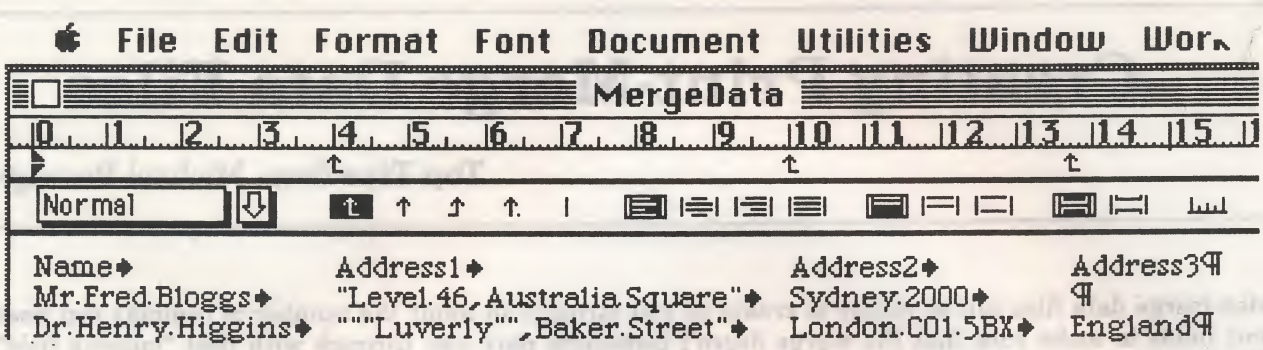


Fig.2

Reflex Plus brings up a dialog box asking you to specify what sort of a file you want to export: text, mail merge, custom designed, etc.

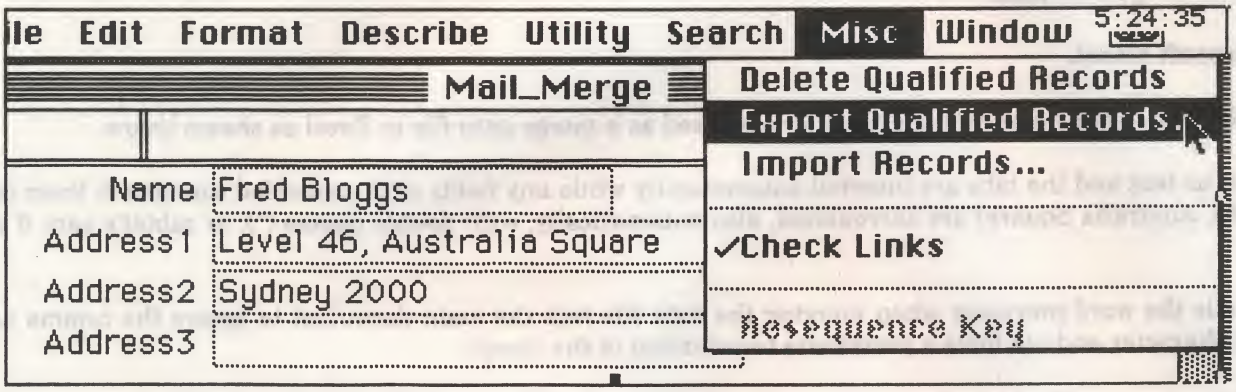


Fig.3

If you choose mail merge format, Reflex will produce a file exactly like the one produced by Excel, in fig.3. Reflex even adds the header line needed by the merge program. Most other database programs will produce a tab-delimited text file suitable for print-merge data files. Check your manual.

3. Microsoft Word 4.

This applies only to Word 4 and **not** earlier versions. Simply use Word 4's new Table feature. Create a new document, insert a table with the appropriate number of columns and enter your data. The result is not unlike the illustration of the Excel data entry form. above. As with Excel, you should remember to make the first line the header.

So, there a few ways to take the pain and frustration out of creating mail-merge data files.

OZWindow

- by Ronny Zulaikha

You like your Mac, eh? But how many times have you thought "The standard windows that come with it just aren't right for Australian Conditions?"

I therefore present for your enjoyment "OZWindows". OZWindows replaces the standard square looking windows with aussie maps. Open the clock desk accessory and it is surrounded by a small map of Australia. Open the control panel and it surrounded by a bigger map. And it's not limited to desk accessories - folders in the finder, documents in Microsoft Word, dialog boxes all come in a new distinctive outline.

OZWindows is distributed as shareware on one of the Apple User Group's disks.

How it works

There are two parts to OZWindows - the window definition, and the installation program.

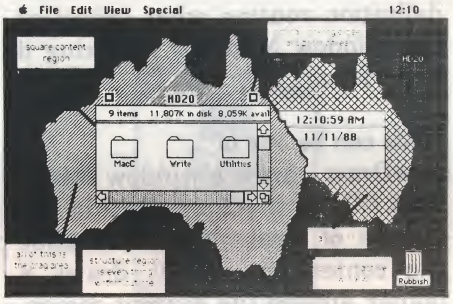
The window definition is a set of routines that defines, draws and grows windows with the new outline.

The installer is a program that you run to place this new window definition routine into the system file.

The following descriptions might require some reference to the Inside Macintosh manuals or other Macintosh programming books.

Regions

Apple has provided a mechanism for programmers to define non-standard windows. You would have seen this being utilised in the Hypercard message window or the TMON debugger. However, neither of these generate strange-looking non-rectangular windows. Part of the data structure that is maintained for every window by the Window Manager and the window definition routine is the 'Structure Region' and the 'Content Region'. (see fig 1. for the OZWindows structure and content regions).



The fact that these areas are represented by the Quickdraw **region** data structure means that these need not be simple rectangles.

Up till now, these regions have always represented the simplest region - a rectangle.

Regions are generated from lines, rectangles and ovals in any combination, and divide the co-ordinate plane into two areas - an area that lies within the region, and and area that lies outside of it. OZWindows defines the structure region of each window by joining 250 lines together forming the outline of an Australian map.

The content region remains a rectangle because many programs assume it to be so - otherwise you wouldn't be able to get to scroll bars etc.

In order to generate as a region the outline of Australia, the location of 250 points on it's

circumference are stored. When joined, they form an outline at a certain size. However, when needing to generate the outline of Australia, OZWindows is given the dimensions of the content region by the Window Manager.

The offsets between the points are then scaled accordingly using fixed point arithmetic. A separate horizontal and vertical scaling factor is applied.

Quickdraw provides a number of routines to manipulate regions, such as **DiffRgn,** that subtracts one region from another to form a third region. This routine is used when determining the region to fill with a pattern labelled 'drag area' in fig 1. The OZ outline is calculated as one region, the square content region as another. The later subtracted from the former gives the region to fill (see fig 2.).

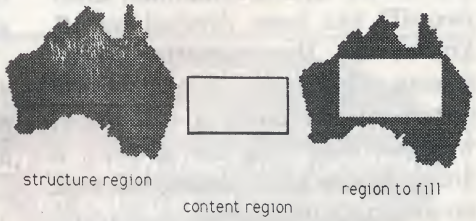


figure 2

Quickdraw's routine **FillRgn** is then used to fill this region with a given pattern. **FrameRgn** is used to draw the border on active windows.

The Window Definition Routine

Resources of type 'WDEF' are called window definitions. The standard system file comes with two - WDEF ID 0, and WDEF ID 1. WDEF 0 contains routines for controlling all styles of windows except rounded-corner windows, which WDEF 1 takes care of.

The window definition routines are called excessively by the **Window Manager.**

The Window Manager routines are contained in ROM, and perform all functions that are independent of the kind of window on display. Whenever it needs to do something that is dependant on the specific kind of window it calls the appropriate window definition routine.

The Window Manager's **NewWindow** routine takes a parameter known as **procID.** This value divided by 16 gives the WDEF resource ID of the window definition required. The remainder is passed to the window definition routine and selects exactly what kind of window is wanted.

For example, **procID**s between 0 and 15 correspond to the window definition routine in resource WDEF 0. **procID**s between 16 and 31 correspond to WDEF 1. For WDEF 0, the remainder after **procID** has been divided by 16, known as the variation code, selects between a standard document window, a document window that can be grown, a dialog box, a plain dialog box and an alternate dialog box.

For WDEF 1, the window definition responsible for rounded-corner windows, uses the variation code to indicate how large to make the rounded corners.

All window definition routines must have it's main code starting at the first byte of the WDEF resource and must expect the parameters passed to it by the Window Manager according to Pascal calling convention. Although I wrote the software in C, the Consulair compiler can be told to expect parameters in this fashion.

One parameter, the 'message' parameter, informs the window definition routine what operation the Window Manager is asking it to perform.

This can be one of ...

1. wDraw - draw a window frame. This fills in a pattern within the outline of Australia, but outside the content region. It draws a border around the content region, and if the window is the active window it places a few pixel border around the entire outline. This routine is also called to toggle the state of the icon in the close and zoom boxes.

2. wHit - indicate what part of the window was hit. When called, this routine is given a point in global coordinates, and returns a code indicating if that point is in the content region, the drag region, the grow region, the go-away region or the zoom region of the given window.

3. wCalcRgns - calculate the structure and content regions.

4. wNew, wDispose - routines called when windows are created and destroyed.

5. wGrow - this routine is called repeatedly when the user is dragging to resize a window. It must draw an outline of a window at a size that was passed by the Window Manager. (This is done as a square not as an outline of OZ. Manipulating regions constructed from 250 lines is not the fastest thing on the planet, doing it many times when a person wants to resize got a bit much).

6. wDrawGIcon - draw whatever is appropriate to indicate that the window can be grown. I kept to the traditional lines and little icon in the bottom right corner.

Installation

So what do we do with this window definition procedure that we have made? We could store it in an application file for exclusive use by that application or we can store it in the system file for use by every application. If we stored it as a WDEF resource with an unused ID, say WDEF 5, applications would have to specially written to use that window definition. They would have to call the **NewWindow** routine with **procID**s between 80 and 95. (80 = 5 * 16).

Instead I opted for *replacing* WDEF 0 in the system file by the new WDEF. This is the job of the installer.

When the installer program is run it allows the user to select which disk to install to, using standard operating DRIVE and EJECT buttons. When the current disk is a disk it deems acceptable for an installation (it must have a system file on it, the selected drive can't contain the currently active system file etc), the INSTALL button lights up.

When the INSTALL button is clicked, the installer places a copy of the new window definition as WDEF 0 in the system file.

The installer renumbers the existing WDEF 0 to a free resource ID so that the system file can be restored to its pre-

OZWindows state.

What it was renumbered to is saved in the OZWindows WDEF 0.

But programming Macs wasn't meant to be easy.

Placing the new window definition as WDEF 0 would have been good enough in the days of 128 and 512k Macs. These days it isn't. The newer Macs have some of the software that's in the system file stored in ROM.

This has two benefits. Things are a bit faster as these resources don't need to be loaded from disk, and some RAM is saved as these resources aren't loaded into RAM. WDEF 0 is one of these resources.

Again, Apple has provided a mechanism to get around this.

By placing a special ROv# (Rom Override) resource in the system file, stating what ROM resource is being overridden and what version of Macintosh ROM we want to do this for, the resource Manager will ignore the ROM resource and use the one in the system file.

Conclusion

I hope you have found this article informative, and that OZWindows gives you a chuckle. I'm surprised that we haven't already seen millions of different window definitions on shareware. Will this be the next MacCraze? I think we've beaten the yanks - windows in the shape of America wouldn't look all that hot

.

About the Author:

Ronny Zulaikha is a software engineer for SCITEC Communications Systems, and a freelance Macintosh programmer for ClickWare.

PRINTER RIBBONS AND TONERS

Imagewriter I/II (black)	**$8.50**
I'writer I/II (single colour)	**$12.75**
I'writer I/II (Heat Transfer*	**$28.50**
Imagewriter II (multicolour)	**$22.00**
I'writer II (m/colour H.T.*)	**$39.50**
Imagewriter LQ (black)	**$31.75**
Imagewriter LQ (multicolour)	**$39.75**

**Ribbons for printing iron-on textile transfers on regular paper*

Laserwriter Cartridge (series I or II) - black	**$185.00**
L'writer (blue/brown)	**$215.00**
L'writer recharge	**$80.00**
Toner Kit for Ricoh PC6000 (to fit Pers Pagelaser, Epson GQ3500 etc)	**$39.50**

LAZARUS RIBBONS
RIBBON AND TONER SPECIALISTS

AUG members receive a 5% discount on these prices in addition to our usual quantity discounts

70 WOLSELEY RD MOSMAN NSW 2088
PH: (02) 960 2737 • OUTSIDE SYDNEY (008) 24 9991 • FAX: (02) 968 1276

Note: some of these products are available through AUG bulk purchasing service.

Update your System Icons

(or perhaps that might read "Backdate your System Icons")

by Michael Bannigan

An earlier version of this article appeared in the June 1987 issue of *Applecations*. In response to several requests from dedicated hackers, I submitted to the Editor for a re-run.

Anyone remember these?

This article is dedicated to those who have missed these icons on their system, and to those who have never seen them, but would love to have them on their system.

A couple of months ago someone walked into my office to use my Macintosh and was amazed and delighted by the cartoon characters that appeared in the various alert boxes that appeared as he bungled his way through a job. "Why doesn't my Macintosh have these icons?" he demanded.

Then I remembered, he was relatively new to Macintosh computing, having traded in his Trash-80 on an SE about a year or so ago. So, of course, he would never have seen the icons that appeared on the earlier Macintosh systems.

I decided that one of the less attractive aspects of the new system that arrived with my Macintosh SE two and a half years ago was the new "internationalized" set of icons that accompany the alert boxes which appear in various application programs.

Amongst the (dare I say it?) "cute" things about the Macintosh were the cartoon characters that appeared in various alert boxes which told you that you had either done something wrong, were about to do something wrong or you might do something wrong. It was all part of the refreshing friendliness of the Mac.

For some inexplicable reason Apple decided to treat us to a whole set of new and decidedly unfriendly icons in place of the ones we had grown to know, love and trust:

For the life of me, I have some difficulty in understanding why the Question Mark icon on the old set was replaced by the Exclamation Mark icon on the new set—has it been wrong all these years? Was the old Exclamation Mark icon deliberately misleading us all this time? I wonder.

Anyway, you may find them attractive, but I don't so I changed them back to the rather nice friendly ones - after all, the Macintosh *is* supposed to be friendly, or have I missed something along the way?

My guess is that it all has to do with the image makers trying to prove that the Macintosh is really a serious business machine. The exceptional performance of the new generation of SE and Macintosh II machines proves that.

So, if you too have a hankering for the old icons, despair not. Here is how to throw out the new and ring in the old.

First of all, get hold of the latest version of ResEdit (no serious hacker should leave home without it) and make sure the disk upon which it resides has a copy of an older system, but never, never System 3.0 which was laden with bugs.

Version 3.2 will do nicely, as it should have the old system icons. You should find it, or an earlier version, on the master disk of Excel 1.0, MacWrite 4.5 and Word 1.05, to name just a few obvious places to look.

Using ResEdit and its system as the startup disk in the internal drive and a *copy* of the new system on which you want to install the old icons in the external drive (or on your hard disk, but in which case take care), open ResEdit.

Open the system on both disks and open the resource called ICON in both systems. Select the first icon on the ResEdit system you want to transfer to the new system and, holding down the shift key, select the other two.

Each will be outlined with a box.

Choose COPY from the EDIT menu.

Select the ICON window of the new system and select the appropriate icons, holding down the shift key as you do, and choose PASTE.

Lo and behold, they are replaced by the icons from the old system.

Then close each window, saving the changes when you are prompted to do so, and you should end up with a new system with the old icons.

Just remember, you will have to do this every time you install a system upgrade.

Finally, copy the "doctored" system onto your ResEdit disk.

This will keep its system up to date so that when you do your next system update, you will have the old icons at the ready on the ResEdit disk to copy onto the new system.

A word of caution: this procedure obviously assumes you are familiar with ResEdit. If you are not, I suggest you get a copy and play around with it on some *copies* of disks you want to work on.

ResEdit is fairly intuitive but it cannot be repeated too often: if you don't know what you are doing with ResEdit, never ever attempt to fiddle with a disk you cannot afford to have crash.

Always use a copy.

If you are going to edit the system on your hard disk make sure you have backed it up before you get to work on it.

Name Tags on the Mac

Q

I am wondering if anyone out there knows of an application, public domain, comercial, or otherwise that produces Name Tags on a LaserWriter or ImaeWriter.

A

First of all, I've found it much easier to generate large numbers of nametags in Unix with a troff macro. But sometimes it's easier to make them on a Mac.

I use PageMaker with various NameTag templates I've set up in which the constant information is on the L/R page.

Then I have two text blocks each for the names and title/company information. If I have a relatively small number of nametags, I just type over the information that's there.

Another approach is to have the constant information printed when you get your card stock perforated. The advantage is that you can get this done in color. The disadvantage is that I've found that simple perforated cardstock feeds through a laserprinter with a Canon engine (Imagen, Apple LaserWriter). But when you have it printed, the curl in the stock introduced when it goes through the press is apparently too much for the laserprinter to handle and it constantly jams. So I usually print on plain paper and photocopy onto the cardstock.

If you have a larger number, you can set up the fields to flow into each other. The problem is that PageMaker is incapable of doing this from page to page and retaining formats unless you set up these flows manually

What I usually do is to set the name in larger letters in its own text block and then allow four lines for other information below i.t

Let's say I have 500 nametags to print. I usually print 8 per page, so I need 63 pages. What you would have to do is position 16 text blocks on each page (you could copy them as a group, but that's still 63 operations) and then flow in text and laboriously click in the flow 1,000 times (actually 998, 499 each for name and other information).

Then you could flow in names and other information easily; my database produces the necessary files to do so. That's why I do this in Unix. I set up a macro once and then merge it with various files of names and other information.

I suppose you could do such a job in TeX, if you have it, much more easily.

The trick in such programs is to properly set traps. For instance, I have a trap which springs after one line of text, reduces point size, and changes from bold to regular.

Article courtesy of Run x

The Editor says -

This is our final Applecations for 1989 and I hope I have filled it full of interesting articles - comments - reviews etc to keep everyone going until the February issue, 1990.

Many comments have been made about the ideas and suggestions I have made to you over the past few months. In order to clarify the issue let me bring a few points to your attention:

1. Not enough Apple articles

Fair enough comment I suppose. The only thing wrong with this point is that the people complaining haven't submitted an article with the complaint saying "OK mate, this is what we want. This review only took me two hours to write and only takes up one page of our Mag. Let's have more like it in the future."

Unless I'm mistaken, 42 pages x 2 hours per page works out at 84 hours per issue. Assuming that statement is a fair thing ON THE AVERAGE, it's not hard to work out that the reason we never get any LOCALLY written articles is a lack of time by all concerned.
Me included.

That's an exaggeration of course - we DO get a goodly number of local articles from our dedicated Apple Buffs but NOT ENOUGH to fill the Apple section.
I try to balance out the Mag. at twenty pages for Apple and twenty pages for Mac, a task that so far has worked. (?)

The way we fill the Mag every issue is also not hard to work out - Washington Apple Pi, Runx, Mouse Droppings and other overseas Mags like ours, all devoted to the advancement of our common interest - the Apple range of computers.

The time I spend on compiling the articles for the Magazine every month runs somewhere into the 40-50 hour bracket and I can assure you it is VERY annoying to get mail complaining about lack of this that or the other when the writer hasn't made any contribution other than a badly written letter.

C'mon folks, let's get our act together and work for our common interest. If you want something and it can be done, I can assure you it will be done, BUT I can only work within the bounds of my abilities and writing 40 pages of original Apple articles every month doesn't fall within those bounds.

2. Errors.

The blame for mistakes in the printing industry ALWAYS falls on a guy known as a Printers Devil. He is the one who changes Bill Gletsos to Bill Gletzos, not me so DO NOT point out any more errors as the whole issue is beyond my control! No it's not - I do apologise for the Boo Boos made, they were not done intentionally and WILL occur again from time to time when I'm pushed for time and should pay head to the old adage "Less haste - More speed".

3. Dealer Bashing.

Well I sure started something with this one!
Let me make the point VERY VERY CLEAR. The whole idea of this one was to bring to the attention of others the actions of the lurk merchants-sharks and other nasties out for our hard earned dollars. Let me also make it VERY VERY clear that dealer bashing does NOT apply to the honest and dedicated people in the computer/dealer industry who offer not only the best in software/hardware but also help and service.

An example of this happened to me not so long ago.
I reached behind the Mac one morning and flicked the switch and then sat there for what seemed like hours waiting for the Mac to smile at me. It never did - snickered maybe, but smile? No way!
I rang my long suffering dealer and we spent about 20 minutes on the phone trying various procedures to see if we could come up with an answer. No luck.
I took the Mac to the showroom and left it with them over night. When I picked it up the next day, not only were my problems solved but all the file were returned to me intact, spelling mistakes and all! I will not mention the name of the dealer 'cause Sea----- might be embarassed and we wouldn't want that would we?
This is an example of Dealer Bashing in reverse and I would assume I will be told of any examples of Top service - Top advice etc so I can also give credit where credit is due.

Let me have letters from anyone who has a FAIR DINKUM reason to be upset at the treatment they have received at the hands of one of the <u>lurk merchants</u> and we will publish them.

Surely the ONLY people who can express concern at Dealer Bashing under these rules can be the ones with the most to hide.

4. Profiles.

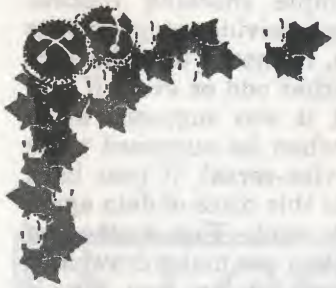
It was our intention to include in our Mag a brief Profile of the various members of the committee so that you could put a face to the names you see in the Mag. At this stage I have only received two profiles - one from Richard Kempe (who has recently changed his name from Kemp to Kempe) and

Arie Havenaar. **Warning**: If I don't get other members of the committee to give me their profiles then I WILL WRITE THEM and we don't want that, do we Bill?

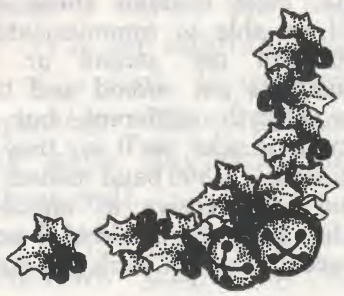
5. Advertising.

We are very skinny on Advts. at the moment and silly as it may sound we need them to break up the articles and generate revenue for the group. They also bring to the attention of the members the many wonderful products that are available to help make us more productive, (dare I say writing articles for Applecations?) and making the use our computers more enjoyable. If you know of anyone who might be interested in placing an Advt. in the Magazine please contact John Paske or me and we will be only too pleased to handle the enquiry.

In closing may I take this opportunity on behalf of the committee to wish everyone



A Very Merry Christmas and a Bright, Prosperous and Safe New Year



MORE on MODEMS

by Grant Kwai

Ever thought about the wonders of the modem but were worried about all these technical terms like baud rate, bits per second, CCITT, Bell ,Parity or XModem?. Well if you were, worry no longer.

First of all, MODEM is short for MOdulator/DEModulator. What this means is it modulate i.e. changes the signals the computer gives out so it can be sent across a telephone line. The other computer with a modem receiving the signal then interprets these signals and converts them back into commands that the computer can understand. That was where the Demodulator comes in.

The computer works in a system called binary which is a series of 0's and 1's. For example, 01001010 might stand for a letter in the alphabet. When you send a program down the telephone line, it would be very difficult to send this sort of message so the modem modulates all these 0's and 1's into a digital sound signal. When the modem at the other end receives this signal, it demodualtes these sound signals back into binary so that the computer can understand it. That is basically what and how a modem works.

Modems operate at different speeds. You are most likely aware when you hear of a modem that it works at 300 baud, 1200 baud 2400 baud etc. This is the speed of the modem can send and receive data. Most modems these days will be able to communicate at 300 bits per second or 300 baud.(Bits per second and baud are slightly different but for simplistic sake, we'll say they are the same). A 300 baud modem can send and receive at about 38 letters a second or about 6 words a second. You can work this out by taking the baud rate-300 , and dividing it by 8 which is the number of bits per byte. Respectively, a 1200 baud modem will communicate at about 25 words a second and a 2400 baud modem at about 50 words a second.

Most modems these days are capable of working at 1200 and 2400 baud as 300 is considered fairly slow and tedious. Another name for these that is sometimes used is V23- 1200/75 , V21-300/300 , V22- 1200/1200, V22bis-2400/2400 BELL103- 300/300, BELL212A- 1200/1200 where a/b is the sending rate/receiving rate in BPS(bits per second).

Another term that you have most likely heard of is CCITT and Bell. CCITT is the world wide standard for telecommunications and stands for Consultative Committee on International Telegraphy and telephony. This means that a modem in Australia would be able to communicate to a modem say in England without any trouble. In the USA however, they already had their own standard called Bell. This is where the Bell standard came from. The Bell standard covers 300 baud and 1200 baud. Fortunately for the rest of the world, the USA has agreed to use the CCITT standard for all speeds higher than 1200 baud. The disadvantage of having these two standards are two modems can't communicate with each other if one is operating in Bell and the other in the CCITT because of the way they transmit their signals. That is why with most modems in Australia, we have both CCITT and Bell standard built into our modems.

Parity is an extra bit that is included with a set of binary digits as a check to see that all the binary digits are transferred correctly. Its value is either a 0 or a 1. There are two forms of parity; even parity and odd parity. The most common parity is even parity however odd parity is also used. Even parity is when all the 8 digits equal an even number. For instance, the first seven digits are 0101010. This totals to three. The last digit is added to make it and even number so when it is sent, it now reads 01010101. When it is odd parity, then the 8 digits will be equal to an odd number. What this is used for is as a simple checking routine. When the receiving computer gets this data, it checks to make sure that is either odd or even. If it is not what it was supposed to be (i.e odd when its supposed to be even or visa-versa), it goes back and sends this piece of data again to get it right. This method of checking has one major drawback; if two wrong bits are sent, then it will still read even and it won't know that the information sent was incorrect because it was sent in even parity.

This is where Xmodem, Ymodem and Zmodem have their advantage. These are much more sophisticated software checking techniques which uses a coded error detection system built into the software package to check errors. Basically, these are some of the more sophisticated techniques of making sure there are no errors when sending your data across the telephone line.

Another factor if you choose to buy a modem is the cost of a communication package and a suitable cable and card if required to allow you to use your modem. For instance, if you have a Apple //e, you will required a super serial card, a suitable cable and of course , the modem just to have it operational. When adding a modem, it is almost essential to have a second telephone so that you can connect one to the computer. This is another cost you must take into account when totalling all your costs if you are working to a budget.

The great advantage of a modem is it allows you to access much more information from Bulletin Boards like the AUG

Bulletin Boards and also get up-to-date information about what is happening all round the world. If you hook up to Viatel for instance, which operates at 1200/75 baud,(requires special software & subscription)_ , you will then have access to hundreds of different organizations such as WESTPAC and Money Watch. All in all, a modem in my view would be a great investment for your Apple and watch out for that sky rocketing phone bill!

A LOOK AT FONTS

By Hans Hoffman

Fonts and the variety of them, are the backbone of the Macintosh computer. Because the Macintosh is a graphics computer, the ability to display the appearance of any font in all its glory, is essential to W.Y.S.I.W.Y.G. or What You See Is What You Get.

A font is basically a selection of letters and/or shapes with a particular appearance. Mostly this selection covers at least the alphabet. It is however also possible for the alphabet to be that in another language such as Greek, or Arabic. Some alphabets are fictitious, and are used for adventure games. Non-alphabet fonts are "Symbol" - a font of mathematical symbols, and "Zapf Chancery" - a set of shapes such as boxes and arrows.

ALPHABET FONTS

Fonts which are basically the English alphabet, usually contain Upper and Lowercase letters, in a selection of sizes. The size of a letter is indicated in "Points".

FONT CHARACTERISTICS

If you look closely at text, you will notice that the characters sit on rows of imaginary lines (like those we learnt to write on in preschool), called baselines.

For the most part the lowercase letters extend below the baseline by a fixed amount, called the x-height. Letters like g,j,etc., have descenders extending below the baseline, whilst letters like b, h, etc., have ascenders extending above the baseline.

Ascent, descent, and x-height are global parameters of a font. In so-called mono-spaced fonts, the width of a character is also global to the font, while in proportionally spaced fonts it is local to ecah character. Needless to say it is much easier to write a formatting program for mono-spaced fonts, and almost all non-graphics computer (IBM, and look-alikes) take advantage of this simplification. However proportionally-spaced fonts are more legible, and for this reason the ability to handle proportionally-spaced fonts was built into the Macintosh.

The sum of ascent and descent is called the "body size". It is the nominal point size of a font. It is worth comparing other printers units such as Picas and Pitch as well.

One inch is divided into seventytwo points or six picas.

Save! **Special offer on** 3.5" DS/DD & HD disks

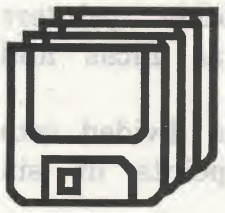
NEVER TO BE REPEATED PRICES

offer available ONLY at the AUG stand

MACWORLD EXPO, DARLING HARBOUR

Thursday 2nd | Friday 3rd | Saturday 4th

November 1989



These are top quality disks and are fully guaranteed by AUG

UTILITY-IZING YOUR MAC ...

with Desk Accessories

By Lynne Keating Courtesy of "The Active Window", from the Boston Computer Society

One of the neat things about owning a Mac is the variety of "utilities" available. There are literally hundreds of nifty applications that qualify as utilities e.g. 1st Aid, ResEdit, Font/DA Mover, etc, and plenty of desk accessories (DAs).

Desk accessories can make life with your Macintosh easier, more productive, and more fun.

Desk accessories are small applications that are attached to your system to be used independent of applications to enhance your work on the Mac. These mini-applications are found under the Apple Menu and are usually constant from one application to another. "Small" and "mini" refer to their size in bytes. In actuality, some of these fun applications can be a big help — and worth far more than the few dollars they cost. In early Macintosh days most of the DAs were freeware or shareware, and many still are. Even the DAs that are commercially marketed can usually be purchased for under $50 — and they are a bargain if they save you time and energy.

To cover all the DAs in existence in a single article would be impossible, so I will describe some that have been created to replace the Apple-brand ones that came installed on your system file and a few others that can make your work easier.

Anyone who has used a Mac — if only for just a few hours — is familiar with the DAs that Apple ships with each system: the *Alarm Clock, Calculator, Chooser, Control Panel, Find File, KeyCaps, Notepad, Scrapbook, and Puzzle*. (Note that Notepad and Puzzle are not found in the latest System 6.0) Each one of these is a small and simple program that becomes an absolute necessity, but as your knowledge of the Macintosh environment expands so does your need for new and improved desk accessories.

ALARM CLOCKS

The Apple *Alarm Clock* enables you to set the Mac's internal clock to remind you that you have something to do. It can be set days, weeks, or even years ahead of time, but like an old-fashioned clock, it can only be get for one alarm at a time. Suppose you need to be reminded of several meetings or appointments within the same day or week and you don't want to reset the alarm clock for each reminder. Then *Smart Alarms* from JAM Software will be more useful to you. It has the ability to store several reminders in a file then beep as appointments arise. If you want an alarm clock that makes a statement, you may want to consider *Big Ben*, which displays the face of the famous London clock. *J-Clock* installs a digital clock in your Menu Bar. *Timer* is a tiny clock that takes up very little space on your screen.

CALCULATORS

The Apple *Calculator* DA is a very simple calculator, similar to the ones you can buy for under $5. If your requirements extend beyond add, subtract, multiply, and divide, there are calculators ranging from an *Abacus* to the *DCAD* Calculator.

The *DCAD* Calculator is fully programmable and handles memory operations trigonometric functions logs, powers, roots, scientific notation, and all kinds of conversions. *Twelve-C Financial Desk Accessory* from Dreams of Phoenix, has a Hewlett-Packard 12C programmable calculator. If none of these suit your needs, you may require the versatility of the *Dubl-Click Calculator Construction Kit* from Dubl-Click Software, which lets you design your own calculator then install it as a DA.

File Locator

Find File was added to the system with the advent of HFS hierarchical file structure. Now that folders actually function like subdirectories, it is easy to misplace a file and a pain to search through umpteen levels of folders looking for it. The *Find File* DA is Apple's way of helping you locate those misplaced files. But what if you wanted to do more than just locate a file? Maybe you want to copy or delete a file. There are several different DAs that can do that and more.

DiskInfo will list your files and let you rename or delete them. *DeskZap* allows you to copy and rename files and also create new folders and new files. DeskZap also has an added feature for setting file attributes (Creator and Type) and a file

manipulator for stripping out linefeeds or control characters. *DiskTop*, from CE Software, takes DiskInfo many steps further (it is a commercial product by the same company that releases DiskInfo as shareware), so that you can search for a file, move it to another folder, or create new folders.

Notepad and Scrapbooks

The *Notepad* and *Scrapbook* provided by Apple are handy places to store text or graphics that you use over and over again. Some enhanced DAs that do the same, plus a whole lot more are: *Multi-Scrap*, which lets you create and access multiple scrapbooks, and *Artisto*, which lets you view MacPaint pictures to cut/copy/paste into an open document. *SmartScrap* is an enhanced scrapbook that can create and access many scrapbooks and lets you select parts of drawings or text to copy and paste. *The Clipper* is an enhanced clipboard that lets you resize or crop a drawing. Both are from Solutions International.

How often have you wished for a tool with more text processing capabilities than the Notepad but with the easy accessibility of a DA - *MiniWriter* or CE Software's *MockWrite* may be just what you are looking for. Each is more than adequate as a low-end word processor. *Quick and Dirty Utilities* from Dreams of the Phoenix includes a Super Notepad, with a larger capacity and search and find functions.

Puzzle

There are plenty of options to replace (or supplement) the Apple Puzzle DA. Check out *3D Tic-Tac-Toe* , *Bagels* , and *DALECS*. These games won't make you more productive, but they can be lots of fun -- and because they are DAs, they are easy to hide when the boss walks by.

Other Desk Accessories

Need an on-line calendar to keep your notes and appointments handy? The *Calendar DA* lets you attach notes to individual dates, which can be years in the future — or even in the past. *DiskTools Plus* from Electronic Arts (originally sold as Battery Pak) and Quick and Dirty Utilities from Dreams of the Phoenix each include a calendar DA.

Quick and Dirty Utilities also comes with Q & D Filer, a small but effective database that is great for addresses and phone numbers. RoloDA is another useful database-type DA.

Trying Out Desk Accessories

DAs are easily loaded into your system using the Apple-supplied Font/DA Mover. For instructions on using Font/DA Mover check your Macintosh Utilities Manual, or see the accompanying article for elementary information. There are other DA movers and managers that let you "try out" a DA before you load it into your system. Check out DA Sampler (be careful - this may not work with later systems). Testing a DA before installing it is always a good idea, especially with freeware and shareware. Not all DAs work with all versions of the system software, so **always check them out first on a backup of your system**

Desk accessories can make life with your Macintosh easier, more productive and more fun. They can also be addictive. One thing you will find is, that you will probably not have enough space to add all of the nifty DAs that you have found essential. That brings me to the DAs that end all others, *Font/DA Juggler+* from ALSoft, and *SuitcaseII* from Software Supply. SuitcaseII lets you access unlimited numbers of DAs stored as DA files on your disk without having to install them.

This is just a starting point for finding out about desk accessories. If there is something you want to be able to do on your Mac and can't find a way to do it within an application, there may well be a desk accessory that has been written to do it. The best place to start looking for DAs is right in your User Group Software Library.

There are many disks loaded with desk accessories, and new ones are always appearing each month.

D.I.Y.

Portable Macintosh - Putting a hard disk inside a Plus

Since the new Macintosh Portable is going to be just another Mac Plus in a slightly different case and slightly faster, with a much bigger price tag,I have decided to use a Mac Plus as my portable Macintosh.

Well, it will be twice as fast, it will fit under an airplane seat, can go with you to the beach...

What I would like to know is if it is possible to put a 3 1/2" hard disk inside a Mac Plus. If so, this would make the Mac Plus almost as portable as the upcomming portable (except it could not be powered by batteries).

The questions that come to mind right now are -

Does the power supply have enough juice to handle the extra load?

No, you will have to figure out how to run off 120V.

Is there room inside the Plus for a hard drive?

Yes, but the packaging is not trivial. You do not want any of your additions to work loose, get too close to the high voltage of the CRT, etc.

How will the SCSI connection be made?

You will probably want to securely clamp onto the SCSI chip. It leaves fewer marks than the alternatives if you ever need to pull out the addition before sending the Mac in to be repaired. Apple repair people don't like to work on machines which have been modified. You want to be able to remove your work without obvious marks.

Does one need special brackets?

Absolutely - you will be on your own.

Is a fan necessary?

Another absolutely - the Plus gets hot enough as is.

Is there a company that might sell an installation kit or something?

General Computer Corporation used to sell the internal HyperDrive, and Apple even sanctioned it, but they had such trouble that they abandoned it. This was early on, before the Macintosh Plus, when disks were low capacity and delicate--I mean worse than now--but they did give up. They even changed their name to GCC.

Open up your Macintosh Plus and look around. Figure out how you will mount the drive, and whether it will stay there. Figure out what power supply you can find which will fit, and where you will put it. Figure out how you are going to tap onto the SCSI bus. Figure out where and what fan you will use.

If you are up to solving these problems, go for it. If they seem like too much or you are not sure about the problems are about, don't do it.

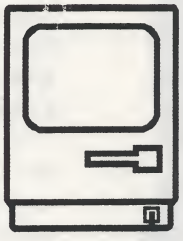
Would I consider putting an extra 3-1/2 drive into my Plus? Yes.

Have I actually done anything other than consider it? No.

Are there better ways?

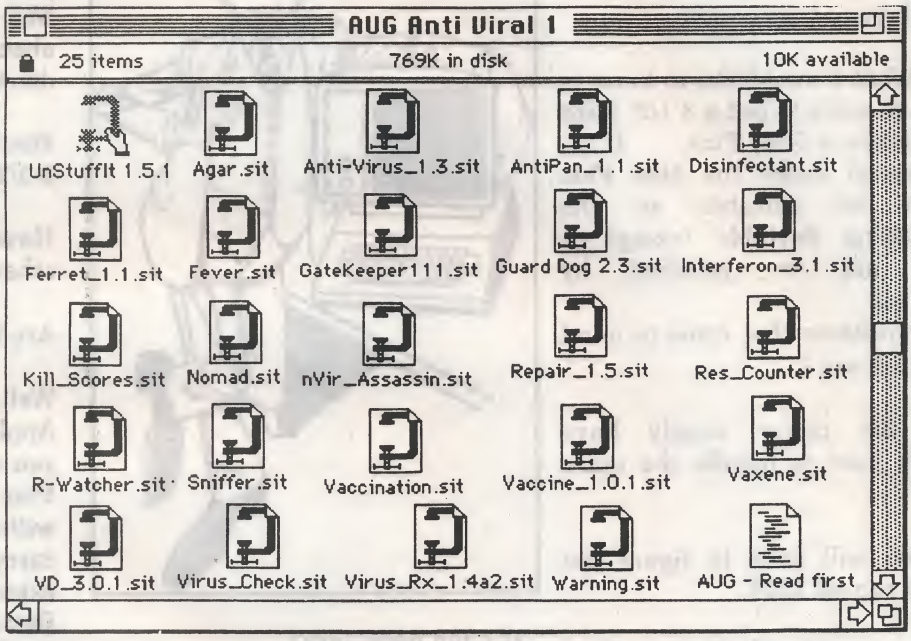
Well, maybe you want an SE? Apple already solved the problems you will face. Or, seeing as how a Plus doesn't travel very well without a carrying case, and most carrying cases will also hold an external disk, it might do as well. Besides, external drives are more flexible than internal drives anyway.

With special thanks to Run x



Virus Fighter

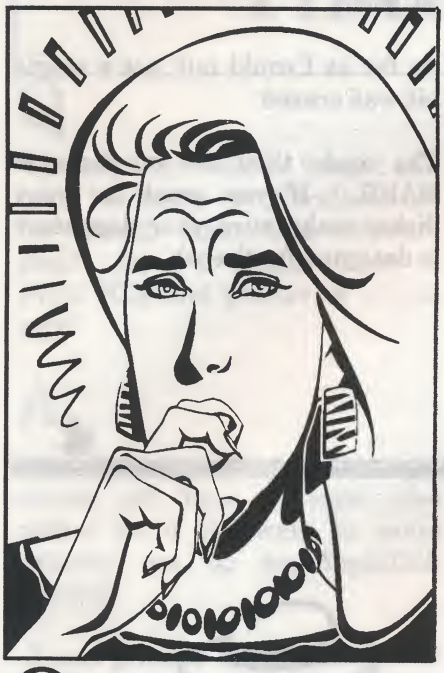
This TOP VALUE AUG Disk is AVAILABLE NOW



See us at the AUG stand at MACWORLD Expo and get this magic little life saver for only

$5

MacWrite II ..... cut-paste-crash



Q

I came across a nasty bug in MacWrite II that I suspect other people have found, also. I'd like to know how I can work around it, or get an upgrade.

When I cut and paste text under certain normal circumstances (I haven't yet isolated the circumstances), the document will suddenly be trashed. The text will become garbled, the cursor will behave in a *very* strange manner, and finally MWII will repeatedly try to re-flow the document until it gives up and crashes.

Our mac lab had the same problem, and here's what we did to fix it. Following that is a non-technical description of what is going on, please keep in mind that I'm not a programmer.

A

Try grouping the whole document together and then printing it. All you guys with this problem, please let me know if it works, I'm kindof interested.

Some documents with rotated text only system error on the Plus, some on the SE also.

MAC ... HARD DRIVE PROBLEMS ?

Apple gets the drive vendors to make ROM changes to the drives. For example, the Seagate ST157N drive Apple sells will claim in the inquiry data to be a Seagate ST157NB.

Note that "B" there. HD Setup looks for this and knows when you have replaced your Apple drive with a non-Apple Seagate.

Very interesting!!

As far as I can tell from external tests, this is the ONLY change Apple makes.

And frankly, I wouldn't use their partitioning, formatting and setup software anyway--get the disk from BMUG with the partitioners on it, or get La Cie's SilverLining disk if you can--still the best and most careful software out there for Macs.

So, if you sent a broken ST157NB to Seagate, and they had to replace the controller card, you would probably get an ST157N, which would not work. Unless you used someone else's setup software.

But Apple is likely to pounce on you if you restart AppleCare, too--beware.

Apple has claimed somewhere that they make other firmware changes besides changing the inquiry data, but I am not sure that I believe them. I can't think of anything that needs to be changed in most current SCSI drives, and I've never seen any problems when I've used TMON to spoof Apple software into thinking that a non-Apple drive was an Apple drive.

Does anyone know what other changes, if any, Apple has done to these disk drives?

Mostly rejumpering them to (1) autopark after 30 seconds, where applicable; (2) making them sensitive to SCSI commands for spin-down, so "shut down" does. You *DO* shut down your Mac properly don't you?

Many people don't, and cause many problems later especially in older non-self-parking drives.)

Nisus Q & A

Q I need a word processor and editor (mostly the latter) that DOESN'T DELETE in the resource fork of the document. It can add it's own resources allright, but what's there has to be there when I save and quit, or else I'm out of the game...
The question:
Since NISUS seems to be such a good buy, how does it handle the resource fork ? I'd really like to know !

A I wish that I could tell you that Nisus handles your request properly, since it is such a simple (and understandably needed) request, but I just did some testing with Nisus on both Nisus format and TEXT documents and when it does a save it does a Delete followed by a Create (and then Create ResFile for the Nidocs).

I assume that one of the reasons that they choose to do it this way was because Nisus uses a VERY interesting document storage structure where the TEXT is stored as TEXT in the dataFork (and flagged as a TEXT document) while all of the formatting info (font, size, margins, etc.) are kept in resources in the resource fork.

What is REALLY cool about this scheme is that even if you go and mod the text with a text editor (which doesn't delete the res fork), when you come back into Nisus, the formatting is EXACTLY what you expect.

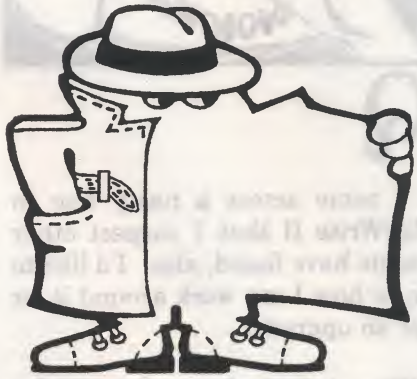
To answer your other questions as to what WP's or Editors do not delete the resFork when saving - good question. I am not aware of any currently available! WP's that do not kill off the whole file before resaving, or in some cases create a .bak (which may save off your resources, don't know!??!) but most of the common text editors that I am aware of do not kill of the res fork, but if they deal with it at all just add in their own. I know that MPW's editor, Think C's editor and my own SigmaEdit do not kill the resFork.

Hope that helps...

Anecdote: A long time ago, I had an industrial strength bulk tape eraser. The thing drew about 10 amps. When you put a tape on it and turned it on, the tape vibrated and made a noise rougly equivalent to a jackhammer. One had to take the tape at least 10 feet away from the eraser before switching it off to avoid magnetizing the tape from the half cycle when the switch opened. At this time, I had some low density TRS-80 disks I wanted to erase, and I figured this would be a good way to do it. I rubbed each disk on the deguasser for about 30 seconds.

As far as I could tell, not a single bit was erased.

The oxide they use on disks is HARD. If you want to erase disks, make sure your deguasser is designed for the job.



Virus-how?

We've recently had several viruses on our Macs, and I was just curious, if anyone could explain to me how the most common viruses for the Mac work.

If you're not a potential virus programmer, check out the fabulous program called Disinfectant it is a very good disinfecting program and it also gives information on how all currently known virusses work.

What exactly is Timbuktu?

Q

Can anybody who has bought and used Timbuktu (by Farallon) tell me exactly what this software does? Does it enable Macs to share HDs and printer in a nice way?

A

No. If you want to share hard drives, get Tops (I forget who makes it); if you want to share printers, set up an AppleTalk network.

I was given a sample version of Timbuktu by Apple a long time ago, but whether or not the current version is exactly like what I have, I can at least explain the basics of it.

You need at least two copies of Timbuktu to use it. Put one copy on any Mac, and set it to accept 'guests' (I think that's what they called it). Install the second copy on a second Mac.

Timbuktu is used through a DA. Select the DA, tell it to connect to the first Mac, and suddenly your machine will 'become' that other Mac.

You will see the first machine's screen on your monitor. You will move its mouse, you will use its processor, etc. In effect, your own Mac will step out of the way, and you will be directly controlling the other machine.

If another person looks at the host Mac's screen while you're controlling it, he can see the pointer mysteriously move (as you move it), pulling down menus, bringing up dialog boxes, opening applications, and so on, all while the host Mac's mouse is sitting there unused. It really freaks out unsuspecting users.

In fact, if someone tries to use the host Mac while you're hooked up to it, you may very well have a 'mouse war' - I believe the person who's sitting in front of the host Mac will have dominance over the mouse, but as soon as he lets go of it, the remote user can play with it.

If you're using an SE or Plus remotely from an SE or Plus, there's no problem. You see the other Mac's screen exactly as it really looks. If you're linked to an SE or Plus through a big-screen SE/Plus or a Mac II, then the host's screen appears in the upper left-hand corner of your monitor (everything else is black).

If you're linked to a big-screen SE/Plus or Mac II through your small-screen SE or Plus, then you can only see part of the host's screen at any given time; moving the mouse to the edge of the screen will scroll it around. And if you're linked to a color Mac II through another color Mac II, you will see the other machine's screen - in black-and-white. Well, nobody's perfect.

In fact, if the host computer has a color screen and you have a monochrome monitor, you still see a black-and-white representation of the host's screen. It's not halftoned (all colors appear as solid black), but it's fine.
(Of course, any configurations I failed to mention above are still possible.)

The only drawback to Timbuktu was that it doesn't let the host computer get at your disks. If you put a disk in the drive of the computer in front of you, the computer that you're linked to remotely can't see it - you have to get up, find the remote machine, and put the disk in its own drive. It's only a minor drawback, but then again, nobody's perfect.

I was very impressed with Timbuktu. I'm using it right now to operate a 'headless' (no monitor) IIcx file server from my Mac SE. Timbuktu is perfect for the occasional administrative tasks that an AppleServer requires.

It can support several people using a machine at once (pandemonium!). It can even let you allow people to just watch your computer remotely, without being able to control it; this is good for demonstrations.

The manual is a tad obscure, but it installs with the Installer, and everything after that is intuitive. (Well, close enough.)

All in all, a remarkably robust package.

Article courtesy of Run x

Moofing Dogcows!

A discussion from the Runx fraternity !

Q

Could someone please answer a few important technical questions for me:

What exactly is a cow-dog, and why do they say "Moof!"?

A

First of all, its a dogcow, and they say Moof. Apple legal would like them to say Moof (TM), but for brevity, we'll just say Moof!

Secondly, In the Macintosh Technical Notes Stack, there is a secret way you can access the hidden Technical Note #31: The Dogcow.

It is very difficult to get to, and it is a real test of your skills as a HyperCard programmer to see it. I almost saw it. I got to the point where it should have brought up the TN, but due to what looks like a bug in the stack, it didn't.

Can someone from Apple please clarify that this indeed should work?

The complete story behind the dogcow is in Technical Note #31 which no longer exists unless you have one of the original copies...or unless you can read it in the Technical Notes Stack V3.1.

To read it is NOT that difficult but it requires the proper attitude and execution of a particular set of actions.

Any mistake in this execution (or a sterile attitude) will result the Clarus (the name of the dogcow) refusing to appear at that time.

You need no skill as a HyperCard programmer to find the Note, as that takes all the fun out of it. If you are going to look for it that way, you might as well peek with ResEdit.

Actually, if you can find TN #31 in the Technical Notes Stack 3.1, you will have had to run into an actual dogcow saying !fooM.

ONE MOMENT PLEASE ...

Sorry to disappoint you, but dogcows are NOT called Moof.

Moof! is the sound a dogcow makes.

Make no mistake about it. Dogcows are called dogcows, unless you happen to know them, like Clarus in DTS.

Moofing Dogcows! More

Someone out there doesn't know what the dogcow is.

This message is for him or her.

Ever choose "Page Setup..." with a LaserWriter selected and click on the "Options" button?

The strange looking animal you see on the page is known as the dogcow, because one can't tell if it's a dog or a cow. Were it to make a sound, the sound it would make would be "Moof."

1: A friend of mine sampled someone saying "Foom," reversed it and made it a beep sound. Try it; it brings the whole thing a new perspective.

2: According to Greg Decoteu an engineer with Apple Printing Group [and he should know], the beast is actually called a Moof, somewhat the way a young child refers to a cat as a "meow-meow."

I hope this forestalls this line of questioning right quickly.

(I hope someone in AUG land knows what all this was about! If you care to drop me a line and explain it to me, then I might be able to explain it to our readers! OR on the other hand Who Cares??) Ed.

Lookie What a DA Can Do with DATA

By Dwight Stewart

There is a new generation of desk accessories entering the Macintosh market. The early desk accessories were simple programs useful only for narrowly defined purposes. Recently several new desk accessories have been introduced that are powerful and/or flexible enough to compare with many stand alone programs.

An outstanding example of this new generation is DAtabase from Preferred Publishers. DAtabase is a powerful, full featured, data base program in desk accessory format that supports text, color images, and graphics.

It is the perfect solution for those with a large number of desk accessories under the Apple menu since this one program easily replaces several other desk accessories (phone books, reminders, calendars, note pads, to-do lists, and scrapbooks, for examples).

However, different from most other desk accessory data base programs, DAtabase is a powerful program that compares with many more expensive stand alone programs and is capable of sophisticated uses. Business records, client information, parts lists with scanned pictures, and retail inventories are easily handled with DAtabase.

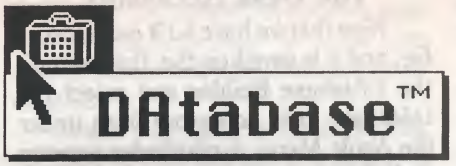
Actually DAtabase comes in two parts. A stand alone application called DAtabase Builder that is used to create the actual files and a desk accessory which is used to view the files and to work with (edit) the information stored there. Let's start with the Builder first.

DAtabase Builder

DAtabase Builder opens to a blank screen with a tool pallet and a selection of menu based features. The first thing you will need to do is select a background picture that provides the look of the file. You create these background pictures using MacPaint or other paint program that saves in MacPaint format.

The background field or picture gives the database file a distinctive look. For example, a phone number database can look just like a book by selecting a picture of a book for the background field. Our phone book could look like a index card, Rolodex card, or anything else your imagination allows.

Next, we want to set up the text label or how the information will be laid out over the background picture. This provides the structure of the database file. For example, if we wanted to set up a address database, we would need a label for each of these; the first name, last name, street, city, and so on. We don't actually enter in the first name (etc.), just the label we want to call each entry.



Next we create the text fields, or the blank lines where we want the of information to go. To continue our example above, we have several labels, first name, last name, address, etc. Now we put in the blank beside the first name label where we want the first name to be entered. The size of the blank is determined by dragging with the mouse.

There are other fields we can choose from. A check field is used if we want check boxes beside a list of options. Looking at our address database, we could have a check list with the words family, friend, business acquaintance, or whatever. When you finally enter the names and addresses in the desk accessory you would simply check (with the mouse) which item on this list applies to the person entered on each card.

We could do something similar with a Popup List field. Instead of having a long checklist with the words family, friend, etc, we could list all this on a popup menu (similar to the Mac's pull down menus) that inserts the applicable item we select into a blank set aside for this.

DAtabase Picture Fields can store pictures of any type and any size, including Encapsulated Postscript images. Normally only part of the graphic can be seen through a small window, with the ability to move the graphic around using the hand cursor. However click twice on the picture to see it full screen.

A calculated field allows separate entries to be calculated together to give still another entry. For example, we could add phone capabilities to our address file (see XTRAs below) and have one entry for the amount of time spend on the call, another entry with the cost per minute of the call, and the third entry would give us the total cost of the call.

There are many other options available. The background pattern can be changed, borders can be placed around entries or any other item, and you have complete control over fonts, fontsize, and style for each entry.

Of course, in the Macintosh spirit, all of these options are available from a tool pallet and selected with the mouse. The mouse is used to lay out everything in our database. Clicking on a tool from the tool pallet puts a selected item into the work area and the item is dragged into place with the mouse.

Changing the layout is easily done (even after data is entered) by simply opening a database file using DAtabase Builder and dragging things into new locations using the mouse.

Xtra Features

DAtabase also uses external commands called Xtra Features. Once installed, Xtra Features act like mini–programs (routines) attached to the main program and can perform any function necessary. This provides a way for anyone to customize and extend the functions of DAtabase.

If a feature or function that you need is not included within DAtabase, an Xtra Feature could be written to handle your special needs. This insures that the program will be useful for just about anybody and greatly extends the power of the program.

For example, to add a phone dialing function to our address file we would select Xtra Features from the tool pallet to bring up a list of the routines that come with DAtabase. Select the Dial Phone option and Xtra Features will place a button called "Dial Phone" in the address file. A dialog box will appear for you to enter dialing options such as touch tone phone, dialer preferences, modem or printer port, etc. Now when ever we click on this button DAtabase will dial a number listed in our address file.

The Paint Grabber Xtra allows you to copy portions of any MacPaint document from within a DAtabase file. The Text Grabber Xtra will copy portions of a text file, clipboard file, or another DAtabase file. The is a time and date Xtra, a calendar Xtra, a screen fade Xtra, and several others are included on the disk.

The advanced user can create their own Xtra Features using a standard development system. The samples included in the manual are written in Pascal, but I believe other languages can be used. These new features can be independent from DAtabase or integrated into the program to add seamless new functions. A chapter describes the complete process. A converter utility is also included to convert Fkeys into Xtra features.

For us less advanced users with a modem, Preferred Software has a online bulliten board that you can call to download new Xtra features created by others. The phone number is included with the instruction manual and is free (except for the phone call).

The Desk Accessory

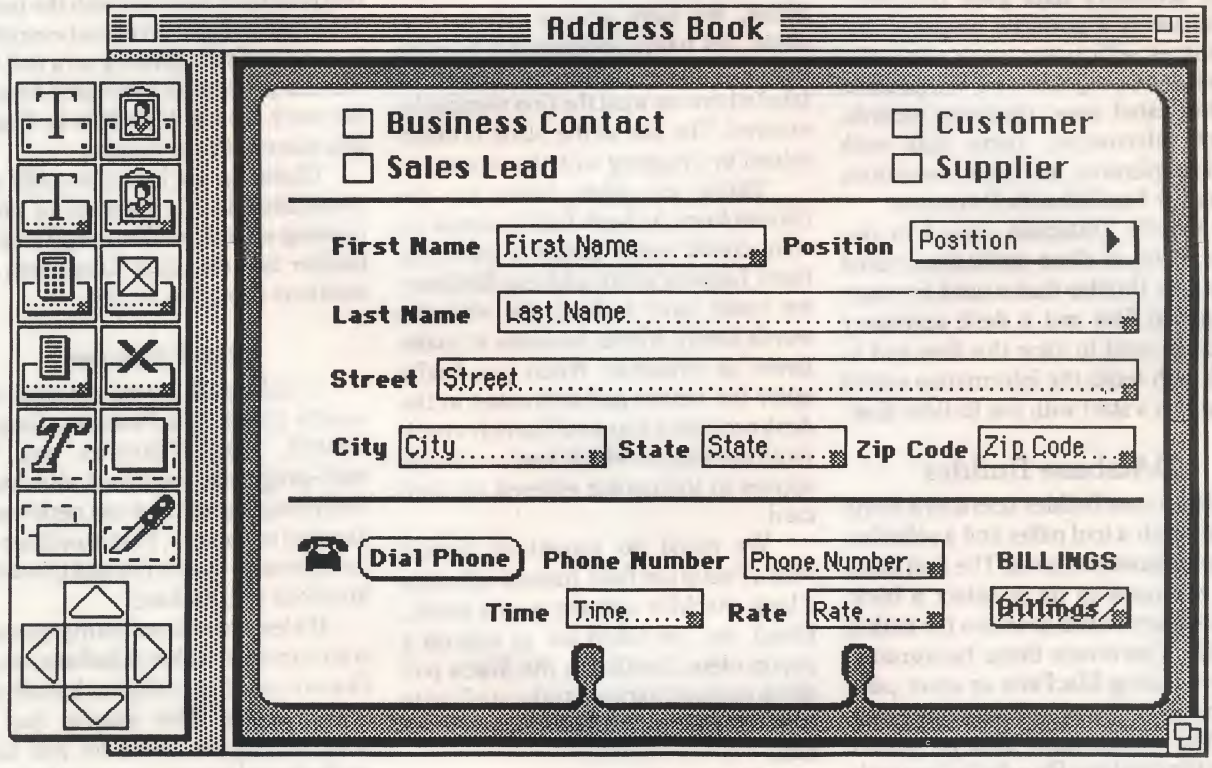
Now that we have built our address file, and it is saved on the disk, we quit the DAtabase Builder and select the DAtabase desk accessory from under the Apple Menu. A minifinder appears and we add our new address book to this finder. The next time we want our address book we simply click on the icon in this minifinder just like we would in the normal Macintosh Finder.

Our address book appears just like we created it in the Builder. On the side is another tool pallet with tools for searching, sorting, printing, saving, and others.

We simply enter the information into the applicable blanks that we created earlier. Click on the blank and start typing. Moving to the next entry is a easy as clicking the mouse or hitting the tab key.

Text fields are setup in the Builder and occasionally the field (area allowed for inserting information) is smaller then the amount necessary to support the text we want to enter. DAtabase handles this well by automatically inserting scroll bars into text fields if you enter more text than would be visible in that text field. If the text is later removed, or reduced in size to fit into the allowed field area, the scroll bar is removed.

As we insert information into our address file, we can return at any time to edit, insert, add, or delete any entry. Clicking the mouse above a field returns the cursor to that field. Even after the file is saved, any changes can be made and will automatically be saved to



Making a DAtabase with DAtabase Builder

disk as DAtabase is closed.

Once the information is inserted we can search for any specific entry by word, number, or we can define search rules such as is, isn't, begins with, ends with, contains, is>than, and is<than. Searches can be limited to case sensitive only, but the default ignores case.

DAtabase also has the ability to view information in list format. This list is an overview of the current file's contents and is intended to let you jump to a selected record from within the list. Often this can work faster then the search feature if you are looking for a specific entry.

There are many other options are available within DAtabase including locking a file to protect privacy, autosave every ?? minutes, pause time when browsing, and still more.

Printing Records/Exporting

We can print the record exactly as it appears on screen with picture, the text only, in mailing label format, or in list format with intelligent column sizing. We can print all records, a fixed range of records, or only pre-marked records.

DAtabase uses the standard Macintosh Printing techniques, plus adds true thumbnails for any file. Using thumbnails you can print 20 or 30 DAtabase windows per page.

The information within a single field can be moved into any word processor or desktop publishing program using cut & paste. If you want to move groups of fields or whole files, the program can export to several popular programs including 4th Dimension, Excel, File, FileMaker, Full Impact, FullWrite, Double Helix, More, Word, WordPerfect, Works, WriteNow, or set up custom export formats. DAtabase will produce a correctly formatted text file for the particular application. Of course, you can also export to any program that supports the above formats.

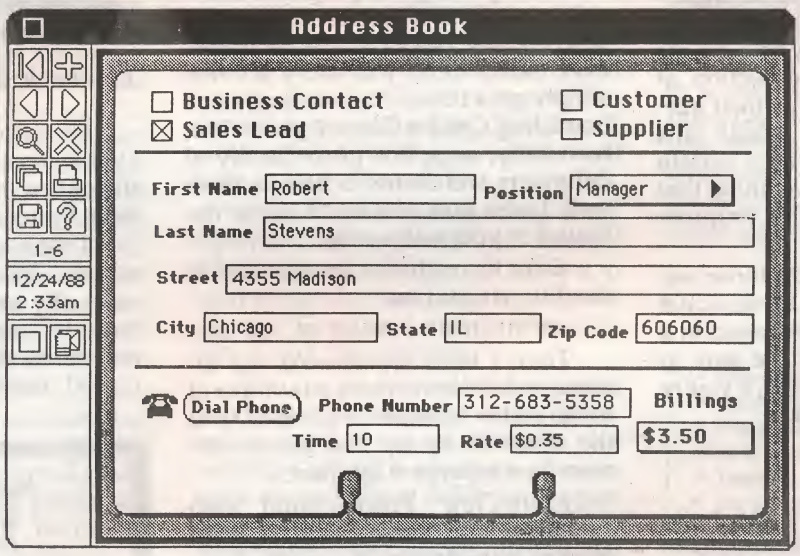
The program will print in color on an ImageWriter II, ImageWriter LQ, and the LaserWriter printers in normal black & white.

Conclusion

DAtabase is a very powerful data base program in convenient desk accessory format. It is well designed, complete, and performs perfectly.

The fact that it is a DA does not seem to limit it's power. DAtabase can easily replace many normal desk accessories, but the amount of options available makes it capable of many jobs usually reserved for free standing applications.

When you open a Database file, memory is checked for free space. If possible the entire file is placed in memory which insures very fast action when functions are selected. If there is not enough free memory, DAtabase loads portions of the file into memory as it is needed. While this does slow things down a little bit, it does allow files substantially larger then can be handled by other DA's. It is possible to set up a DAtabase file that is 20 Mbytes or more, according to the program's author.



The finished DAtabase ready for use.

The manual is well written with the first chapter explaining computer and data base terminology. The quick start tutorial chapter that takes you through each step of using the program. Another section explains how to create Xtra Features. The manual ends with a quick reference, tips & tactics, and an index. The index could use some work, I found it difficult at times to find where in the manual I read about a certain feature.

Preferred Publishers seems willing to support the product. The manual includes an 800 technical support number, a BBS support number, and the company's address on Compuserve (76566,2014) and GEnie (Whitman). I can be reached on MacNET (StewartDw) to answer some questions.

DAtabase is compatible with System version 6.0. The program is compatible with Multifinder, Finder, or Switcher. The program is quicker under Multifinder. It will operate (according to Perferred Publishers) on a Macintosh 512E, but is optimized for use of the Macintosh Plus or higher machines.

DAtabase ($99.95) (NCP) is available from Preferred Publishers, 5100 Poplar Ave, Suite 706, Memphis TN 38137. It is one of those excellent programs from a small company that no Macintosh user should really be without.

Copyright ©1989 by Dwight Stewart

All commercial rights to the above article are reserved. No part of this article may be reproduced in any form without permission in writing from the author. In the event of publication, all copyrights remain the property of the author.

MUGs are given permission to reproduce this article to publish in a single issue of the club newsletter. No other rights granted. Payment for usage shall consist of one copy of the complete club newsletter issue that contains the above article. Dwight Stewart, 713 Surfside Drive, Surfside Beach SC 29575. Phone: (803) 238-3572

In Search of a Little Number Crunching:

MathView Professional

by Lou Pecora

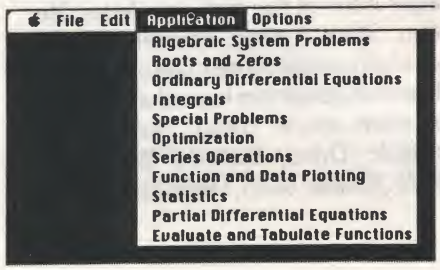
Many technical people often desire a working collection of standard numerical algorithms, ready to go to work when they need them, but without the necessity of programming. They just want these numerical tools available at any time. This can include anything from statistical analysis of data, algebraic manipulation of quantities (including matrices), evaluation and tabulation of arbitrary functions, plotting of functions and data, and much more.

MathView Professional is an attempt to give Macintosh Users just such a collection without the pain of programming. It is a large (601 kilobytes) collection of numerical programs gathered under one roof by an overlying Macintosh interface. In my opinion, it's a flawed attempt. The collection of algorithms is a good one, but their integration into a workable whole falls short. It can be very useful in certain situations, though, and I've found that people who can't or won't program like it a lot. So read on.

Below I list many of the inner sets of routines that MathView Professional provides. If you're not interested in a particular set, just skip it. Be sure to read the last section, however, if you're interested in this program.

Features

The graphic displays the main menu selection of Applications from MathView Professional. It summarizes the available categories of numerical analysis. The Options menu item simply allows for some flexibility on choosing numerical precision and plotting options. All the real action is under Applications. Here are some of the details of how you use MathView Professional to accomplish these things.



Data Input and Output

You often want to input and output data from any calculational program. Programs of this type rarely live by themselves, but often have to communicate their results to other programs (e.g. plotting programs or spreadsheets) or other calculational features within the same program so you can do further analysis or better display the data.

In MathView Professional data is input and output through standard ASCII or text files. One nice feature of MathView Professional is that you have a great variety of data file types to choose from. Mainly the choices come in the type of delimiters. A delimiter is a character that comes between two data in a file. This enables a computer program to know where one datum leaves off and another begins. Typical delimiters are tabs, spaces, and commas. Many computer programs allow only one type of delimiter and are very strict about it. Do not have other delimiters mixed in! If you do, you often simply get a bomb. No warning, just a bomb (e.g. Cricket Graph). MathView, mercifully, accepts a great variety of delimiters and seems to handle them well. It also give you the choice of delimiter in your output file.

Data for matrices are handled in the following format:

n,m: a11 a12 a13 ... a1m a21 a22...a2m...anm

Here I have represented the dimensions of the matrix by n (number of rows) and m (number of columns) and the elements by aij. The matrix elements are separated by spaces.

MathView Professional also handles a wide variety of data, from fixed point to floating point. The floating point is written in the usual x.xxxxesxx notation, where x's are numbers, e is the character "e" and s is a sign , + or –, with + optional.

Functions in MathView

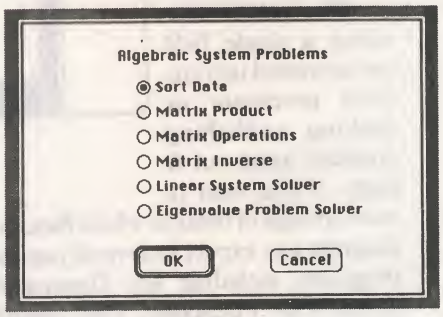
Writing functions in MathView Professional is so similar to many other computer languages that anyone with even the slightest amount of computer programming experience will only need to glance at the manual. Anyone else will have to read some, but function writing is really very simple. The only thing you would have to get used to is using "^" for exponentiation, viz: for xy write x^y .

There is one warning, and it is a flaw (not a bug, a flaw) in MathView Professional. When writing floating point numbers in functions, you can not use the floating point "e" notation (see above). You must use 10^exponent notation. For example to use 2.5116 x 10-5 write 2.5116*10^(-5). I struggled for some time with MathView Professional telling me I had a function error, until I finally figured out that I was writing floating point values in my function like they were written for data, and that was a no-no. I had read the manual, but it is easy to miss. The reason for this is, presumably, because "e", in a function, stands for the base of the natural logarithms (2.78...) and so cannot be confused with 10^... . I think this should be changed. The "e" floating point notation is everywhere on computers, even in MathView Professional's data. The natural logarithm base can be written by the common, mathematical notation exp(...) which is used like sin(...) is used for the trigonometric function sine.

Algebraic Systems Problems

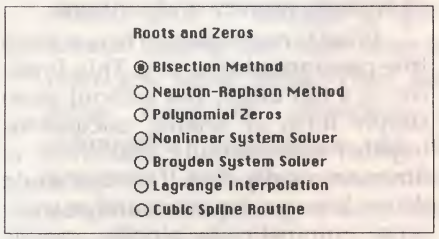
Except for Sorting, this category includes mostly matrix operations. The dialog box you get when selecting Algebraic Systems Problems is as follows:

The topics are self-explanatory. The matrix values can be entered either manually or from a data file with a "matrix" structure (see above). The results of these calculations can be copied to the clipboard or stored in a file of your choice. All the operations appear to work well. Since you're limited only by your computer's RAM, you could work with quite large matrices (eg. 100 x 100), although you might spend a good bit of time staring at the screen while the Mac does its thing.



Roots and Zeros

What this means is that MathView Professional can numerically attempt to find solutions to systems of nonlinear equations. This is no mean feat and anyone who has attempted to write a program to do this will appreciate that this is a tough problem to solve. MathView Professional offers several techniques to try.



Beware, though, that you should not use these blindly. If your work dearly depends on the solution, I highly recommend you acquaint yourself with the technique you choose and know its limitations, especially its expected errors.

Ordinary Differential Equations

This is something that not everyone feels comfortable with. It involves calculus and, therefore, leaves some in the dark. If this is the case with you just skip forward to a section that applies to your work, but be aware that solutions to differential equations are incredibly useful and necessary. From the trajectories of space shuttles, to the behavior of bending beams, to atomic processes, they are all governed by differential equations. These are important mathematical systems to be solved.

MathView Professional offers you a nice selection of techniques for the solution of ordinary differential equations: evaluate derivatives, partial derivatives, Runge-Kutta methods, Adams Methods, a Bulirsch-Stoer system solver, shooting methods, and finite difference methods. This is a nice selection of methods. But the user should beware, as before, that blind use can sometimes lead to disaster. You should know something about your system (Is it a "stiff" equation? Does it have chaotic solutions?).

Up to 75 simultaneous differential equations can be solved with some of these techniques (although I'd hate to hold off lunch to wait for a Mac Plus—or any PC without a math coprocessor—to get the solution).

You can get a trajectory (or table, if you like) of solutions for single differential equation solvers. This is a nice feature. Getting a trajectory of solutions for systems of differential equations, however, cannot be done. This is a shame because it is often the way that solutions to differential equations are best viewed. One set of solution numbers usually tells you nothing.

This is something that not everyone feels comfortable with. It involves calculus and, therefore, leaves some in the dark. If this is the case with you just skip forward to a section that applies to your work, but be aware that solutions to differential equations are incredibly useful and needed. Trajectories of space shuttles, behavior of bending beams, and atomic processes are all governed by differential equations—important mathematical systems to be solved.

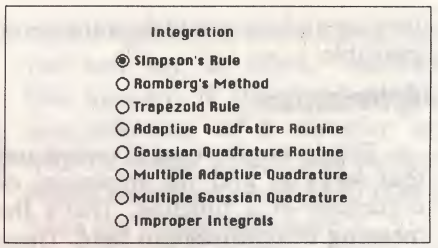
MathView Professional offers you a nice selection of techniques for the solution of ordinary differential equations: evaluate derivatives, partial derivatives, Runge-Kutta methods, Adams Methods, a Bulirsch-Stoer system solver, shooting methods, and finite difference methods. This is a nice selection of methods. But the user should beware, as before, that blind use can sometimes lead to disaster. You should know something about your system (Is it a "stiff" equation? Does it have chaotic solutions?).

Up to 75 simultaneous differential equations can be solved with some of these techniques (although I'd hate to hold off lunch to wait for a Mac Plus—or any PC without a math coprocessor—to get the solution).

You can get a trajectory (or table, if you like) of solutions for single differential equation solvers. This is a nice feature. Getting a trajectory of solutions for systems of differential equations, however, cannot be done. This is a shame because it is often the way that solutions to differential equations are best viewed. One set of solution numbers usually tells you nothing.

Integrals

This, in a sense, is the other calculus side of differential equations. Integration is actually more difficult than differentiation. For this reason alone numerical methods have come to have great importance in the application of calculus to science and engineering. MathView Professional allows the following integration schemes:



Special Problems

This is sort of a catch-all of useful routines covering complex powers and roots, special functions, and fast Fourier transforms. Fast Fourier transforms are a well-known technique for signal analysis—this is a nice addition. But limitations of MathView Professional (see the final section, below) surface when you want to modify the Fourier transform and see the resulting function.

Special functions show up everywhere in science and engineering. MathView Professional offers a nice collection. I find these especially useful to test routines I write myself to be used in my calculational programs. Some of these are especially complicated and it's nice to have such a check. One nice feature of MathView Professional is that all its special functions can be used in a calculation requiring a user defined function much as one might use the simple trigonometric functions sin(x) and cos(x).

It would really be nice if the user could add to this list his own special

Special Functions

- Chebyshev polynomial of order n
- Gamma function
- Complement of Error Function
- Error Function
- Legendre polynomial of order n
- Hypergeometric function
- Hermite polynomial of order n
- Modified Bessel function K
- Bessel function of the first kind
- Modified Bessel function I
- Bessel function of the second kind
- Jacobi Elliptic function sn
- Elliptic Integral of the 1st kind
- Jacobi Elliptic function cn
- Elliptic Integral of the 2nd kind
- Jacobi Elliptic function dn
- Confluent Hypergeometric function
- Associated Confluent Hypergeometric function
- Laguerre polynomial of order n and superscript alpha
- Jacobi polynomial of order n and superscripts a and b

functions which would then always be available.

Optimization

This is simply a set of techniques that seeks to find the minimum or maximum of a function. That's the meaning of optimization here. There are several methods used here, some allowing constraints, too: steepest descent, conjugate gradient method, simplex method, Wolf quadratic method, Raleigh-Ritz method. Again the user should know which method best applies to his/her problem.

Series

Here, series is a power series of the form a[0]+a[1] x +a[2] x2+a[3] x3+... . The a[j]'s are numbers input by the user. The program can take a finite series like this and manipulate it to produce a ratio of two series, a series to any power (even irrational), composition of two series, the reverse of a series, and inverse of a series. This would have been a big help to me back when I was taking calculus.

Function and Data Plotting

MathView has the capability of plotting 2D or 3D user defined functions (see Functions section, above). This I find useful only for pedagogical purposes. What most technical types want is plotting of data. MathView does some raw data plotting, but it is limited. Unfortunately, it does not plot 3D data. It also uses a hidden line algorithm to do its 3D plotting.

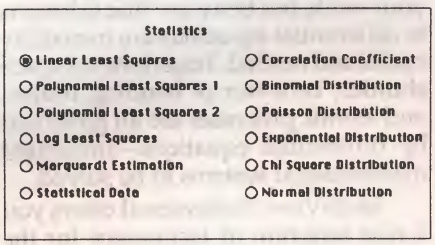
It would seem to me to be better to use the Mac's Quick Draw ability to draw overlapping polygons on the screen to do a "hidden line net" surface 3D plot. However, it does a passable job of 3D function plotting and for getting the feel of function surfaces as defined by a real function of two variables it would be useful to a student.

An advantage of MathView has is that all its special functions can be used in the definition of a new function to plot, just as one might use sin(x) to generate numbers for the trigonometric function sine, in another function.

Statistics

MathView offers quite a bit of statistical analysis.

I do think that for hardcore statistical types, one of the Macintosh statistics programs (like, say, StatView) would be much better suited. For technical types who only occasionally need statistical routines, but good ones, MathView offers a useful choice.



Partial Differential Equations

This section, while sounding high powered, is not useful. It offers a few solutions of common linear partial differential equations. The real problems are often nonlinear partial differential equations, which are outside the scope of any program like this, and in fact any Macintosh, except perhaps a Mac II or Mac IIx with lots of memory. This section would have been better left out, with the plotting section enhanced instead to handle more data plots, especially 3D and/or the ordinary differential equations section having solution for a trajectory of points for a system of equations.

Evaluate and Tabulate Functions

This section is much like the plotting section in that it handles only user defined functions. It is marginally useful to technical types and best for students who have to learn about functions such as sin(x)+3 e-y +z2. I personally think that even a computer-phobe would be better off biting the bullet and learning BASIC to program simple functions and generate tables of values. The flexibility and (in the end) efficiency of programming is well worth it over this section of MathView. The only advantage I see in MathView is that all its special functions can be used in the definition of new functions to tabulate, as in the plotting section.

Should you get it?

Despite all these features, MathView is a program that is difficult to recommend to everyone. Its myriad of choices are countered by its rigid structure. Although one can take output from one calculation and use it as input to other calculations, most features remain isolated. The program seems to be just like its foundation—a collection of separate numerical algorithms.

What is really needed here is more true programming ability. This, I realize, is a tall order, but without some simple form of linking calculations together automatically, MathView, at times, seems crippled. If the user could define his own functions and in some sense automatically pipeline results from one calculation to another, this would be a dandy package.

At the minimum the author should consider the following. Drop the Partial Differential Equations feature and perhaps other little used sub-features and beef up what's left, like the plotting capabilities—especially the plotting of 3D data, or systems of differential equations. Make the dialog boxes for the calculations less hierarchical. As it is now, if you make a mistake in a dialog box you've already "OKed", you basically have to start all over. There should be a quick way to go back without having to type everything in again. This is important since many calculations have to be done over and over with slightly differing parameters (see how "looping" would help? That's the programming that's missing).

I would recommend it to students needing to get a numerical feel for the topics covered in MathView, to programmers needing to check their number-crunching work, and to computer-phobes who can't program, but who need to calculate some of the things MathView can do. It is somewhat expensive, though ($145 from MacConnection). And, unless you already have a good Basic, Fortran, C, Pascal, or whatever compiler, I'm more tempted to tell you to get one of these and learn to program what you need.

But then, remember what I said. Where I work, those who can't or won't program thought MathView was a gem. Consider your needs, time, and skills carefully and check out MathView. It may be for you.

Lou Pecora is just a guy with a Macintosh who knows his math.

First Impressions of CLARIS CAD

From: Bill Leue

I've owned Claris CAD for a couple of weeks now, and I've played with it enough to get a decent feeling for the program. Here are some notes. They don't come close to providing an exhaustive description of the program, but they may help people in comparing it with other Mac CAD tools.

Overall, I'm impressed with the program. The user interface is VERY smooth. It's essentially a large superset of MacDraw II, and so for me, a long-time MacDraw/I/II user, much of CCAD seemed natural to use.

The forte of the program is a large battery of geometric constraints and object snaps which allow very precise placement of graphic elements. Claris calls this collection "tools, methods, and modifiers". In this nomenclature, "tools" are what you'd expect -- those icons you see at the left of the page. In addition to the MacDraw II tools, you get fillet/round/chamfer, dimension tools, ANSI circle "crosshairs" (yay!), B-splines, etc.

To avoid cluttering the screen, most tools have "pull-right" pop-up extensions which allow several tools to fit into one icon: e.g., the "rectangle" tool also has a "square" tool. Whichever tool version you pick replaces the original one in the "visible" tool icon, thus minimizing the number of times you have extend the pop-up.

Like MacDraw II, double-clicking the tool locks it in for multiple use.

No matter what tool is selected, there are a number of "methods" and "modifiers" available to change the way the tool works, either alone or in conjunction with graphic features already on the drawing. The "methods" are specific to the particular tool in use: for instance, if the circle tool is selected, then the varying methods available for specifying the circle include two-diagonal-points (the normal MacDraw/Paint method), center-radius, three points on circumference, two points on circumference and radius, etc. "Modifiers", on the other hand, are selected mostly independently of which tool is selected.

The modifiers allow placing of a new graphic element with great precision in some desired relationship to another object or objects. Modifiers include "point on line", "center", "parallel", "perpendicular", "tangent", "intersection", "invisible intersection", etc. You can use more than one modifier during the creation and alignment of an object. For instance, if you want to draw a straight line which is tangent to two existing circles, you select the line tool, double-click the tangent modifier, click on the edge of the first circle, drag to the second circle's edge, and release. Viola!

For me, the slickest and most "gee-whiz" feature is the "polar duplicate" menu selection. You select a graphic element, and then you can say, in effect, "replicate this element N times around the circumference of a circular arc with its center at X,Y, and do/don't rotate each new element so that it faces the center of the arc."

I was able to draw a 60-tooth gear by drawing its hub, rim, tooth root circle, zooming in, drawing a single tooth, and then duplicating it over the full 360 degrees. Try that in MacDrawII!

Oh, yes -- some other features that I really missed in MacDraw II and are present in CCAD: you can draw a box using the rectangle tool and then "break apart" its sides to make 4 independent lines. Conversely, you can take a bunch of lines and arcs and join them together into a true object which can be pattern filled. This "join" operation is different from and in addition to the normal "group" operator. Also, AT LAST - real dashed lines which work for circles, polygons, etc.

Misfeatures, Limitations:

It's no speed demon on a Mac Plus. Too bad, because MacDraw II is more than satisfactorily fast on the same box. Oh well, it should scream on a IICX, heh heh. It's also a bit pricy (list $800) compared to say, MiniCad +, which also includes a 3D editor. I've heard it compared unfavorably to Canvas 2.0, but I don't really think it's a fair comparison: one's a drafting tool, and the other is more of an illustration tool. (just my opinion)

I'm very unhappy with the way it prints on an Imagewriter LQ. Don't mistake me -- this is not related to the other notorious LQ printing problems. MacDraw II

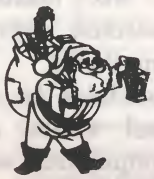
prints just fine on this printer. However, if I take the same drawing and import it into Claris CAD, the printout looks lousy.

There are distinct breaks visible every few millimeters on the edges of circles. Lines don't print out at the right thickness -- a 1-point line, for instance, prints out much thinner than it should. If you change it to a 2-point line, itsuddendly "jumps" to a much thicker line.

Things look fine on the screen. My impression is that the printing algorithms are optimized for use with plotters, not printers.

I suppose this makes sense with a real CAD program, but it's disappointing.

Nevertheless, I consider these problems to be warts on an otherwise excellent design tool.

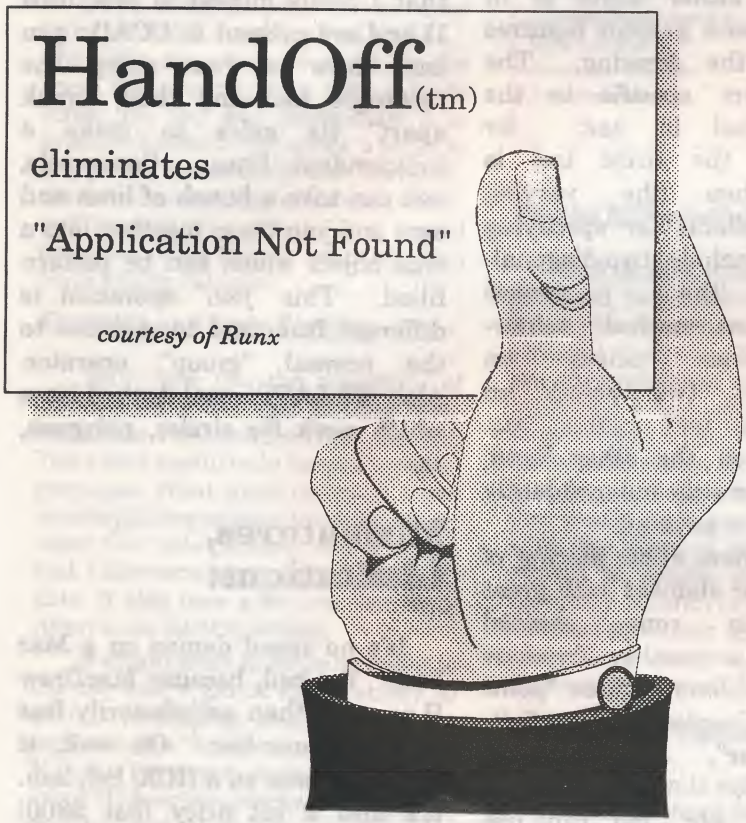


HandOff(tm)

eliminates

"Application Not Found"

courtesy of Runx



Software Innovations, announced the release of HandOff, a utility that will allow users to open any file from the Macintosh Finder!

HandOff eliminates the dreaded "Application Not Found" alert that the Finder displays when the user tries to open a document that was created by an application that the user doesn't have or a document that was created by another type of computer.

When the Finder can't find an application to open the selected document(s), HandOff presents the user with a friendly dialog to select a substitute application. This substitute can then be used for all documents created by the same missing application eg. users can redirect all MacWrite documents to MacWrite II.

HandOff also provides the ability to redirect files to Macintosh applications based on the filename extension.

This will be useful for those borrowing files from other computers, especially PCs.

For example, the user could map all ".TXT" files to their favorite word processor or all ".WK1" files to their spreadsheet.

Jean-Louis Gassee, President, Apple Products, says, "I've used HandOff repeatedly and I definitely feel it's a nice, unobtrusive and very much needed extension to my Macintosh. Another tribute to the imagination and care of software developers."

HandOff will be shipping next week to those who have already placed orders and will be available at dealers in October. For more information, contact Fred Hollander at Software Innovations

BIG graphic - little review! I thought the product had merit and therefore worth a mention - h o p e y o u agree.

Ed

STANDARDS WANTED ... NOW.

With thanks once again to Run x

The mac is supposed to present a simple and common user interface to all users.

This simple but powerful concept is being ignored over and over again by many programs. It is time Macintosh programmers agree on a standard for such things: if it's going to be "Search", then let's always call it search, not "Find".

Similarly, command key combinations should be consistent. For example, "Search Again" could use cmd-G, not cmd-A or cmd-T or whatever weird combinations occur to programmers at 2AM.

Finally, as to the placement of commands in menus: why must I always "hunt- and-peck" for a command every time I switch applications?

The following questions occur to me:

1. Is there any consensus on what command keys to assign to menu commands?
2. Are there standard names for common commands?
3. Are there standard places to put these commands?

Examples of the kind of mess we're faced with follow:

Find	cmd-F
Search	cmd-S
Find Again	cmd-A/cmd-G
Replace	cmd-H/cmd-R
Change	cmd-H
Replace and find	cmd-H/cmd-R
Select All	cmd-A (or no command key

As you can see, there isn't much of a standard. Since nearly every program has its own version of these features, wouldn't it be nice to have a standard?

Each time I go into another program, I keep on running into these silly inconsistencies, and it takes me forever just to get used to it and then I have to switch to another program

Swim Meet Program for Mac

by
Glen Eustace
Software Manager,
Computer Centre
Massey University
Palmerston North
New Zealand.

I have a HyperCard Stack that sorts swimmers or any event that has several lanes and heats. The swimmers can be sorted by FINA rules or any other rules that may be required by the meeting. For further info contact:

Tony Bray
Computer Centre
Massey University
New Zealand

...And You Thought That Was The Right Margin Marker—Ho, Ho, Ho

By Philip C. Russell, Editor

Did you ever import text from Word 3.0 (or 4.0 in 3.0 format) into PageMaker and find that it fills less than the designated column width you are pouring into in PageMaker? For example, you Place Word 3.0 text in a two inch wide column in PageMaker, and it fills only one inch of width, leaving one inch of blank space at the right.

Unless you are a true master of Word's oddities, you probably have spent a lot of time correcting this type of mistake.

You probably went into the Indent/Tab menu choice and pulled the right-hand black triangle over to the dotted line indicating the right margin for the two inch column. That will do it all right, but there is a better way.

To help you understand the way in which Word 3.0/4.0 handles column widths, do this little exercise. I will be giving you numbers from my screen in this illustration. Substitute those you encounter when you repeat this exercise.

Open a New document in Word 3.0 (4.0 is similar in most respects, so I will use 3.0 for this example). Show the ruler (Command/R). Jot down the position of the left-hand margin/indent (my margin is at 0 and the left indent is at 1/4 inch). If you do not have a left indent, pull the top (indent) marker over to 1/4". We are doing that so that paragraphs will look like paragraphs when we get ready to type them.

Now go to Page Setup... under the File menu. You will find boxes for Left, Right, Top and Bottom margins. (Mine says 1.25 in. Left and 1.25 in. Right and 1 in. Top and Bottom. Jot down these figures. Close the Page Setup... dialog box. Open Page Preview (Print Preview if you are in 4.0). Click on the margins icon and you can see that you have (in my case) 1 in. Top and Bottom, and 1.25 in. on either side. Close Page Preview.

Now type four paragraphs of more than two lines each. Three lines each will be fine. Highlight them all and specify Justified text.

Save this document as "Untouched Original."

Highlight the entire document. Copy. Open a New document. Paste. Save this document immediately as "Indent Is Not Margin." Show the ruler (Command/R).

Now, in this document, highlight the entire text. Next, grab the black triangle at the 6" mark (if your settings were like mine; otherwise the black triangle at the right side of the ruler. Move that triangle left to the 2" mark. Notice that there are still a series of dots left at the 6" mark on the ruler.

Now for the secret! That right hand black triangle WAS NOT THE RIGHT MARGIN MARKER. How's that for a little surprise? What you moved was the RIGHT INDENT MARKER. The series of dots at the 6" marker indicate the right margin.

Fooled you, huh?

Save this document. Open a New document. Paste the four paragraphs again (it's still on the Clipboard unless you goofed. If so, go back and Copy, then you can Paste.

Name this document "Correct Margins." Show the ruler (Command/R). Now go to Page Setup. Again, you see that the Left and Right margins are set at 1.25 inches (on mine, that is—use your figures if they are different).

Now we would like a two inch wide column. A little math shows that the two margins (1.25 and 1.25) equal 2.5 inches. Your paper is 8.5 inches wide. So, 8.5 minus 2.5 equals 6 inches. Of course that is exactly what those little dots at the right end of the ruler are telling you. Since we want a two inch wide column, subtract 2 from 6 and we get four. So we want to add 4 inches to the right margin figure, giving us a 5.25 right margin and a 1.25 left margin. The remaining space will be our two inch column.

Don't get confused now! All we did was add the necessary amount to the right margin to bring it in until just two inches was left! Put another way, change the Right margin figure in Page Setup... until the new figure, plus the Left margin figure, subtracted from the page (sheet of paper) width, equal the DESIRED COLUMN WIDTH.

Now that you have made the change, Save "Correct Margins."

Next, open PageMaker. Set up a three two inch columns. On the next page set up one four inch column. Pour the three documents in three different columns on the first page. Also pour the "Indent Is Not Margin" text into the four inch column on Page 2.

Now examine the columns. 1 and 3 look fine. The second (Indent is Not Margin) looks funny, with the letters all crowded down the left margin. On Page 2, in the four inch column, the text does not fill the four inches. In fact, it only fills two inches.

Highlight the second column and open the Indents/Tabs menu item. Look for the right hand "margin" or "indent" marker. It may or may not be at the dotted line point, indicating the right margin. If it is not, drag it there. If it is already there, simply say OK and close the dialog anyway. The magic happens now. The text suddenly fills the two inch column, as you wanted.

Now, on the four inch column, highlight it, open the Indents/Tabs menu item. The marker will need to be pulled over to the dotted line to force the text to flow four inches wide instead of two.

So what happened:

- Untouched Original poured OK because the length of the typed text lines in Word was equal to or larger than the intended column width in PageMaker. Any text typed without touching the Right Indent marker will pour correctly in equal or smaller width columns.

- Indent is Not Margin did not pour correctly because we DID NOT move a margin marker, but moved a RIGHT INDENT marker. PageMaker thinks you want the material indented that far from the right margin, and that is what

Is it a modem - or a radio?!

I have a problem that's cropped up only recently.

When I dial, there is a small pause after the modem completes its dialing sequence and before it actually connects with the other computer.

In that pause, I hear music, news, weather reports, etc. coming out of the modem's speaker.

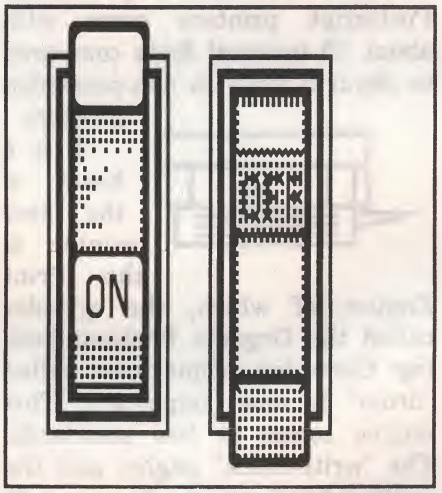
Apparently this stuff is from a radio station as opposed to aliens or KGB agents.

I had this problem once.

I lived about a mile from a powerful rock music station in Knoxville, Tennessee. The station was so strong that sometimes I could hear it very faintly on my stereo record player, with the record player not even plugged in! (No, I don't believe in magic; I believe it was the piezoelectric crystal in the needle responding to currents induced in the wiring.)

You didn't say whether you could use the modem. I got so many errors I could seldom even log on, and even when I could, the line quality was so poor it wasn't worth the effort.

We're talking really, really unusable here.



I called Ma Bell (as I recall, this was when the grand old lady still lived).

At that time, the phone company tried to give you good speech lines, but if you had computer problems that was your tough luck.

Fortunately, I could (sometimes) hear the music on my telephone, so I had a case for getting a telephone person out to the house. Doubly fortunately, I got a competent young guy who took an interest in my real problem, and spent half a day working on it.

There are filters that the phone company can put on your line to screen out the radio station; he did so, and they didn't work.

Then there are real, industrial-strength filters that the phone company has but doesn't want to give you (or even let you know they exist); he used one that finally got one phone jack in my house useable.

After that, the modem for my Apple II+ worked great, and an acoustic modem I used with a VDT worked pretty well most of the time, provided I used that one wall jack.

from Run x with thanks

it tries to do. You move into the Indent/Tabs dialog box and adjust the right indent. If it appears not to need it, say OK and it will get fixed anyway.

• Correct Margin poured correctly because you made the necessary margin adjustments with the right tool, the Right Margin box in Page Setup—not the Right Indent marker in the Ruler.

Make ALL of your margin changes in Page Setup.

How the laser printer works

by Vinayak

Courtesy Microlines

The Laser Printer is the most important development in the computer industry for the final presentation of a had copy. Simply put, it is a copy machine driven by a computer. The components that make up a laser printer represent the highest state of printing technology, including laser imaging, paper movement and micro processor control.

The main components of the laser printer are the communication port, controller with ROM based fonts and RAM, a laser and optics, charge device, photosensitive drum or belt, toner, paper tray, and toner fuser.

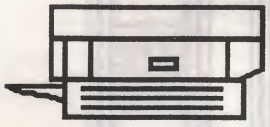
Compared to a 9-pin dot-matrix printer which gives resolution of 120 dpi (dots per inch) the laser printer adheres to a resolution of about 300 dpi and above. Thus the finished product of a laser printer gives an impression of higher resolution.Further compared to dot-matrix printers the laser printer is able to print a larger number of typefaces

This typeface comes in three formats, i.e. resident, cartridge and downloadable. The Resident Fonts come with the printer and are held in the ROM chip. Of the three, Resident Fonts are the easiest to work with. Cartridge Fonts are ROM based cards that are plugged into the cartridge Slots of some printers. These are the second most convenient although they contain limited number of typefaces and you can load one or two at a time only. Downloadable fonts are bit-mapped faces that must be loaded into the printer RAM and remain there till you power down. These consume large amounts of computer disk space, need to be reloaded into RAM at every startup and may sometimes be not compatible with you DTP software.

In laser printer technology there are now two main standards.

(1) Adobe's System's Postscript page-description language (PDL) is a programming language specifically designed for controlling laser printers. Examples of printers which use postscript are Apple Laserwriter II NT, NEC Silentwriter LC890.

(2) Non-Postscript printers that emulate the HP's Printer Command Language (PCL). Examples of which is HP's Laserjet Series. Postscript printers come with about 35 internal fonts compared to about 5 fonts in non-postscript printers.



The heart of the laser printer is the Print Engine, of which, the cylinder called the Organic Photoconducting Cartridge, sometimes called "drum" is most important. This engine comes in two standards. The "write-black" engine and the "write-white" engine. An example of a "write-black" engine is the Cannon LBP-SX which is used in the HP Laserjet Series II. It is called a "write-black" because its laser draws the inside area that the toner will fill. Ricoh's 4080 engine is an example of a "write-white" which is used in Texas Instruments Omnilaser. It is so called because it draws the margins round the image, which is then filled by the toner.

The main difference between a copy machine and a laser printer occurs at the beginning of the process. Copy machines bounce light of the fluorescent bulb off the source document and aim it to the spot where it is duplicated. While printers convert into light the date that is passed from the computer through the controller. The machine first interprets the signals form the computer translating these signals into instructions for the movement of the laser and paper handler. This then generates a light from a low-powered laser, aimed at the drum, which creates positively and negatively charged dots that make up the image to be printed. Paper is sensitized so that it will accept the toner that makes up the image. The drum which is charged by the laser then comes into contact with the toner (which has a static charge of it's own), causing the toner particles to stick to the dots on the drum. As the paper is drawn in, the drum presses against it and the powder leaves the drum and clings to the paper.

After the toner is transferred the sheet leaves the surface of the drum. The rotation of the drum brings it next to a wire called the "corona wire". This wire erases the negative/positive charge so that the cycle can start again. It works just like the erase head on the tape cassette recorder.

At this time the rollers takes the paper that has gone through the drum to another part of the printer where heat and pressure is used to fuse the toner permanently onto the paper. This is why paper fresh form the printer feels warm. As you can see the process is quite complex, thus the printer needs to construct the full page in RAM before the controller gives the go-ahead to print.

A Laser Printer cannot print half a page, wait, and then print a second half. Once the print engine starts, the sheet must continue through the process until it emerges in the out bin. The more complex the image the more RAM is used. This is why a 128K laser printer will not be able to print a complex graphics image. For those interested in Desktop Publishing, they will need in excess of 1.5MB of RAM to do their work comfortably.

PYD: Protecting Your Derriere With a Floppy

By Philip C. Russell.

There are several good reasons for keeping a bare bones System and Finder on a locked floppy. For our purposes, we are assuming that you have a hard disk and are using either Suitcase of Juggler. First, here is how you make the bare bones floppy copy.

Make a clean copy of the System and Finder for the system version you will be using by copying it from virgin Apple disks which you know to be all right. If you are not sure, take any original Apple Macintosh disk to your Apple dealer or your MUG (if they are licensed to distribute Apple systems) and get a fresh, current System Folder.

Configure this System and Finder as follows:

• Clean out all of the INITs and cdevs, leaving just System and Finder. Throw away the empty System Folder, and store the System and Finder out in the open on the floppy.

• Using Font/DA Move 3.8 or newer, move all desk accessories out of this System except Control Panel and Chooser. Do not discard the DAs you toss out. Be sure you have a copy of them somewhere. Now use Font/DA Mover 3.8 or newer and remove all fonts except Monaco, Chicago and Geneva. Be sure you have copies.

• Add every size you own of Geneva and Monaco to the System. If you use other sizes of Chicago, they must go into the System, too. The rule when using Suitcase or Juggler is that ALL of a font must be in the same location. No splitting Geneva with 9 and 12 in the System and 10, 14, 18, 20, 24, 28 and 36 in Suitcase.

• Install any FKEYs you will be using in the System.

• If you use a different layout in the Finder, use ResEdit or Layout 1.7 to make changes in the floppy's Finder.

Now this System and Finder should be IDENTICAL to the System and Finder on your hard disk. If it is not, correct that right now. We want identical System and Finder. Of course, your hard disk will have a lot of INITs, cdevs, and other stuff. That stuff doesn't go on the floppy. Remember, we will be replacing System and Finder, not all of the contents.

If you are following along correctly, your hard disk System Folder now has a System and Finder identical to those on the floppy. It also has other items in it, but we aren't worried about them.

Lock the floppy containing the mirror of your System and Finder. Label it as your "Emergency System," or whatever tickles you.

Make sure that Suitcase or Juggler on your hard disk is controlling ALL of the fonts and DAs except those you placed in the System itself.

OK! Your hard disk bombs. You can't make it stop bombing. After you do all of your first aid tricks and still have a problem, it is time to replace the System and Finder.

Groan! I heard you! You think it is going to be hard. Negative! Turn off the Mac. Slip in the "Emergency System" disk. Boot up. The floppy System is now in charge. The hard disk icon shows up beneath it. Drag a copy of the System and Finder on the floppy to the System Folder on the hard disk. Remember, we are only dragging System and Finder, not something called "System Folder," since dragging a System Folder to the hard disk would ask you if you wanted to replace all the contents. If you did that, all of your INITs, cdevs, folders full of Suitcase fonts and DAs, etc., go bye-bye forever! Just the System icon and the Finder icon, please.

If you think INITs and cdevs are causing the original problem, now is the time to haul some of them out of the hard disk System Folder into a special folder on the desktop, while you find out what your problem is.

You might also hold down Command/Option/Shift keys and get the Control Panel. This will cause the Mac to "zap parameter RAM," which may clean up your problem.

Now, Shutdown, leave the floppy disk out, and reboot. Nine times out of ten your problems are over.

Another use for this mean/lean floppy System and Finder relates to calls to tech support departments of software companies. They NEVER know what oddball stuff you are running in your System Folder. It is quite possible that an INIT or some other crazy utility is causing your problems. Soooooo, before you call tech support, run the offending application using the clean System and Finder OFF THE FLOPPY, so that you can reassure tech support that there is no INIT or cdev, etc., which is causing the problems.

They will bless you. Your long distance phone calls will be less. You will have a feeling of having done something neat.

It's worth it!

RUNX REPORTS

MacNosy

I had some questions regarding MacNosy:
1) What is the amount of memory needed to run the program comfortably,
2) What is the newest version (mine is from '86 and I can't find any info on updates and how much it costs to update)?

Nosy runs very comfortably in 1 Meg and probably does fine in 512k for small target programs.

I have sucessfully Nosy'd a program containing 1.2MByte of CODE resource with Nosy running in a 1M partition.

Jasik is continually working on his products and there are minor revisions/extensions monthly, major releases every 3-4 months. The current version is substantially rewritten since 1986 and now uses a standard Mac interface and comes with a legible manual.

I believe that Nosy is now sold only as part of the 'Debugger' package which is distributed through APDA and Bonsu so most Mail-Order retailers can get it (make sure you get at least version 2.95 btw).

IMHO Nosy/Debugger are extremely powerful, useful tools. By comparison Macsbug, TMON and even SADE are unspeakably primitive, and even Think's nice debuggers are missing too many feature like natural format trap arguments and discipline.

On the other hand, the product does not get much press because (again IMHO)
1) Jasik can be very irritating to deal with, and
2) Most popular press reviewers and their readership don't understand the product or have any use for it - it is at best a "gee whiz."

Nonetheless, it has saved me many hours of bug tracing in my work, and has made (as a side effect) new customers for Jasik out of many of the companies I beta test for because with almost no investment of my time, I can

give them specific bug reports almost down to the line number of their code without my acess to their source.

I will now descend from the soapbox.

I know Steve Jasik but have no relationship, other than as a satisfied customer.

Unformatting disks?

Other than degaussing, can anyone suggest a way to get previously initialized disks to appear uninitialized?

There are a couple.

First you could molest your disks using a magnet. This is very rude.

Secondly you could use an eraser. We use a device like this on the computer centre where I work, and someone was able to erase about 10 tapes in one go. (Imagine how many disks would fit in the same place as 10 tapes!)

If you are very rude you can start to erase the disk (from the finder) and use a paperclip to get the disk out before the Mac has finished erasing it. The latter will give a different warning when you reinsert the disk though.
The first methods will say 'This disk is unreadable', the latter will say 'This is not a Macintosh disk'.

I personally vote for the eraser method as the other method is both extremely foolish and EXPENSIVE if things go wrong!

There is one big difference between genius and stupidity.

Genius has limits.

Cheap disks - harmful

It seems to me that I need more storage space because of my LaserWriter etc. Recently, I have been looking into removable cartridge drives.

★ These drives all use the same cartridge mechanisms and the differences are all in packaging, software, and support.

None-the-less, prices range from $850.00 to $1799.00 for a single cartridge drive. The general trend is for the better known companies, i.e., the ones that advertise more, to charge more for their drives. I don't believe the price gives any indication of quality in this situation.

★ There was a discussion of this at a BMUG meeting. What came out of it was that there are a lot of ways to affect price, other than marketing/advertisement costs.

However, if you get a hard disk, I'd recommend you get more memory as well. The LaserWriter keeps a listing of the font names in RAM, and this slows down printing if you've got something like the Adobe Font Library hard disk attatched to your printer.

★ This is not correct - the LaserWriter does NOT keep a list of disk font names in RAM. What is true is that versions of the Apple LaserWriter driver prior to version 6.0 had performance problems with printers with lots of fonts available. If you use a printer with lots of fonts on the disk such as Adobe Font Folio(tm), then make sure you upgrade to version 6.0 of the LaserWriter driver.

★ This is partially untrue, as well. BMUG uses LaserWriter and Laser Prep 6.0 all the time, and the Font Folio (tm) slowed down the NTX with 2 Megs of RAM considerably.

Where it used to take 30 seconds to image a page, it was taking 2 minutes. That's what I consider a major slowdown. Once the hard disk was disconnected and the LaserWriter was cycled, everything was fine and dandy and as fast as ever. I was told then that the problem was that the font names were stored in RAM, and that impaired the imaging speed.

That's where I got my info; where'd you get yours?

Internal HDs for the SE

The biggest reason not to buy an internal hard drive for an SE is, if the thing breaks, your whole machine is down while the drive is being fixed.

For the most part. 'Course, if you like opening your own case, you can just take the drive out yourself, put the machine back together, and have a one-drive SE to use. You'll find out that's not very feasible. One-drive Macs are unuseable.

Buy a two-drive SE and an external drive. Should the drive be out of commission, you still have a two drive machine which is minimally useable. The tradeoff here is, of course, portability. If you need that, get an internal drive.

Examine your needs and make the choice accordingly. BTW, you can get third party internal drives that sit inside a two-drive machine, on top of the top floppy. That gives portability and useability if the drive goes south.

Tektronix graphics

We recently bought Versaterm Pro for the MacII and I've been using it for tektronix emulation

Now, all I know about tektronix is what I find in the relevant man sections of the unix plot function.

To take full advantage of the graphics capabilities of VersaTerm PRO, you should acquire a Tektronics 4105 manual.

The unix plot library is for the Tektronix 4014, which is a nice graphics terminal but not nearly so advanced as the 4105. Look in the back of your VersaTerm PRO manual and it should list the publications you need.

There is also some programming information in the VersaTerm PRO manual, so you can get started even before you get the publications from Tektronix.

Once you get the integer and coordinate encoding scheme figured out, the rest is pretty straightforward.

General gripe

All this neat new stuff - Multifinder, ATM, System 7.0, etc. - is great BUT us people with 1MB Macs are rapidly being disenfranchised.

Heck, with the Grappler LQ stuff loaded I can't run HyperCard. Add ATM to the System as well, and I probably won't be able to run a word processor with all the printer stuff loaded. Which means that I may as well not have a printer in the first place.

The Macintosh mentality seems to be that everyone is rich enough to buy everything needed - 68030, 4MB+ RAM, 32-bit color display - to run the Latest and Greatest, and "the rest of us" are pretty well screwed.

That isn't what the Mac mentality is *supposed* to be, BUT that is what it *is*, though.

HINT, HINT, Apple and the rest of you! I STILL think it's ridiculous that I could upgrade an XT-clone with monochrome text display to a 386 with hi-res graphics for $700, but I can't upgrade my Mac SE to a 68030 and hi-res graphics for under $2100!
End of general gripe.

LaserwriterII NTX - slow?

★ BMUG uses LaserWriter and Laser Prep 6.0 all the time, and the Font Folio (tm) slowed down the NTX with 2 Megs of RAM considerably. Where it used to take 30 seconds to image a page, it was taking 2 minutes. That's what I consider a major slowdown. Once the hard disk was disconnected and the LaserWriter was cycled, everything was fine and dandy and as fast as ever. I was told then that the problem was that the font names were stored in RAM, and that impaired the imaging speed.

★ I don't understand why the print times were slowed so much if they were really using LaserWriter/LaserPrep 6.0 and the appropriate version of PrintMonitor (which also comes on the Apple Color disk w/LaserWriter 6.0).

What the Apple printshop does at the beginning of the job is query the printer for all available fonts. If you have a printer without a disk, typically this is 35 font names or so. If you have a printer with Font Folio(tm), then this can be 500 font names or so.

Prior to LaserWriter driver version 6.0, the method used to extract the font names from the printer and store them on the Mac for use during the print job took a considerable amount of time when the list of fonts was large. Times of a couple of minutes were not unheard of. This was improved quite a bit with LaserWriter 6.0.

It isn't clear to me that the amount of RAM in a printer affects this part of the process in any significant way.

If indeed there is a problem then there is probably something unusual happening that hasn't been uncovered.

Again, I strongly suggest that users of printers with significant numbers of fonts available, upgrade to LaserWriter 6.0.

Cheap disks - harmful?

The *proper* question to ask is, "What is the *most reliable* 20-40 Meg disk I can buy?" as opposed to "what is the cheapest"

For many people in the world, cost is the most important matter regardless of what their needs are.

I assert that an *unreliable* hard drive can never be economical at *any* price. The agony tales told in this forum testify to what John Heckendorn of BMUG says:

In the sense that a hard disk is the heart of a computer, you're best off with the best one available. Besides, over the life span of most drives of 4 - 5 years, the difference in cost amortizes to something much less than a comparison of list prices would lead you to believe.

As far as prices to quality relationships are concerned it all depends upon the company that is doing the reselling - many of the products are exactly the same - just have a different case and label.

True, the drive mechanisms come from very few factories. However, the cases, the power supplies, the wiring, the cables and connectors, and the training and supervision given the assemblers - all these are usually different and can have an effect on reliability. Also, the vendors' support policies differ widely. Usable tech support and liberal return policies are not cheap!

In all these factors, "better" costs the vendor money and has to be reflected in the price.

Granted, there are bargains if you have the knowhow, time and luck to find them. But the market is so price-competitive, there are so many vendors chasing buyers, that the correlation of price to quality has to be fairly close. (But let me quickly qualify that- Apple have something like a captive market for internal hard drives, and the high price they charge does not have to reflect better quality than other vendors. It certainly doesn't reflect the cost of better warranties!)

Graphics Animation package

Okay, here's a chance for all of you Mac aficianados to prove how good Macs are.

What I'm looking for is a sort of "adventure game construction package."

In simple terms, once somebody else has spent an hour or three putting togetherthe components, the software should enable you to go through two stages

1 You use the mouse to build a little map of rooms and hallways and so forth, and places obstacles in the hallways. This is done map style then

2 when you are done, somebody can simply progress through the map in 3D, and move along these rooms and hallways and so forth. The ability should be there to have fairly sophisticated art - but only in a sort of "picture" format.

Animation would be nice, but not essential. The ability to put in things for the player to have to "fight" and/or defeat, and the ability to have objects that the player can carry around, would also be nice. The more the merrier.

Anybody heard of something that does this? PD, freeware or shareware would be great. A commercial package with a reasonable price would be good.

From what I've heard the things I want to do aren't all that hard to set up, but I'm no Mac programmer so it's up to you.

Sorry, but an application that builds adventure games is NOT what makes a great computer, especially in the case of the Mac.

Fortunately for you though such a program DOES exist on the Mac although I don't promise that it will do everything you want it to do.

The one that immediately springs to mind is WorldBuilder by Silicon Beach software.

It was written expressly for making your own graphics adventure games and I've seen very impressive results. It is a piece of commercial software but I am not sure of the price, try calling one of the Mail-order places.

Another alternative is HYPERCARD, which is fairly easy to get hold of although it's status is not precisely public domain. I've seen

some stunning adventures done in HYPERCARD but I believe there is a problem with saving games. For a great example of a HYPERCARD adventure try finding a copy of DeathMall 3000.

There may be other alternatives and you might consider asking some of the local talents on the net. Glenn Andreas who wrote that great PD frp "THELDROW" occasionally reads and posts here.

If you have the money, World Builder seems like a good investment.

Word Processor Page Layout Wars

OK, there appears to be a lull in the word processor and page layout wars so let's see if I can stir up a discussion.

When can we expect some new versions to play with? Are all the software houses waiting for system 7.0 with it's outline fonts, line layout manager, and new script manager?

What will Pagemaker 4.0 give us and when will we get it? Can we at least expect verticle column justification, more intelligent hyphenation, and separate printing of even/odd pages?

Will the introduction of system 7.0's InterApplication Communications Architecture (IAC) signal the end of the huge, do-everything programs like Fullwrite and, to a lesser extent, Word?

Will we begin to see the unbundling of spelling checkers, thesauruses, hyphenation engines and dictionaries, glossaries, etc.?

Will FullWrite 2.0 ever get out the door?

Will Microsoft ever give Word an elegant user interface?

Where does NISUS fit in to the word processor/page layout picture?

Reply

Oh boy oh boy. Big questions.

Layout manager -- who knows? It's a sure goin' to be interesting tho.

PageMaker 4.0 - no such beastie; PageMaker Professional is coming soon (maybe November) with color

extensions included, integrated spellcheck/search-and-replace, text and object rotation, an endless array of fun stuff; keep those eyes open.

Other software:
Letraset's DesignStudio (RSG! 5.0) is scheduled for release soon (Seybold?) and its got loads of fun

Postscript output to a LaserWriter?

I don't have a printer.
To print, I have to bring my disks to a public Macintosh room, copy everything onto a hard disk, and make use of the University's laser printers.

So, I set the Chooser on my Mac in my dorm to print on a (nonexistant) LaserWriter.

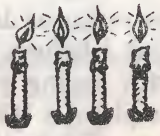
I went into an application, brought up the Print dialog box, and pressed Command-F immediately after I clicked on OK.

Just as advertised, my Mac saved a file titled 'PostScript0' on the disk instead of trying to actually print the document.

I copied the PostScript0 file onto a floppy along with the SendPS application, and tried to send it to a LaserWriter.

No go - the LaserWriter keeps reporting all sorts of errors.
It will not print.

Well, there are a couple of things you can try.



First, create the file using cmd-K to include the LaserPrep file. Make sure you stick to the basic Times, Helvetica, etc. fonts resident in the LaserWriter`s ROM.

If the LaserWriter you print to has fonts downloaded to a harddisk, you can use those as well, otherwise you must download the fonts you use prior to the file.

If that doesn't work, there is a program which runs on UNIX systems called Macps.

You create your PostScript file using cmd-F, upload it to a UNIX host attached to a LaserWriter and use Macps to print it.

By the way, you don't mention which version of the LaserWriter driver you are using.

We have this problem with 5.2.

The problem seems to be related to having rotated text in the document. If we haven't rotated text, we haven't seen the problem.
If you have rotated text you may or may not have the problem. One user reported that she left the rotated text alone, moved other objects and the document printed.

I haven't had the time to research the effects of changing versions of the OS and LW drivers, etc, so can't recommend what is the latest version of system software that doesn't have this problem with MacDraw 1.9.5.

MacDraw crash

from the Runx BBS

I try to print a file from MacDraw, the system bombs. I can print from other applications without any problems. I can print other MacDraw files without any problems, but the minute I try to print this particular file, it crashes.

I tried to copy the figures in the file, using the clipboard, to an untitled window and print. It still chrashed. What gives? Is there a bug attached to the figures, or file?

BTW, the bomb has an ID=02. I'm using a Mac Plus, 1 meg, a Laser Writer NTX, and MacDraw 1.95. System 6.03.

We are seeing this problem also. It also happens on a Mac SE as well as a Plus.

The Macintosh Way : A new Book By Guy Kawasaki

by Phillip C. Russell, Editor, Mouse Droppings, MUG of Corvallis, Oregon.

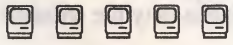
Guy Kawasaki, one of the most famous members of the Macintosh team and current head of ACIUS, has written a book about life at Apple. It is primarily a book about marketing and the Macintosh, with insights born of his tour there as Software Evangelist. This is the first book in YEARS which I have not been able to put down until I finished it. I started when the UPS delivery person dropped the galley proofs off and didn't stop until I read page 210, which told how the book was done on a Macintosh (naturally). There is even a credit for QuicKeys.

So, what to tell you about this book? It's fun. It's a primer on marketing. It's interesting. I decided, with Guy's permission, to excerpt some definitions which Guy spread throughout the book. Go buy the book as soon as it appears on local bookstore shelves. As TV interviewer Larry King would say, "It's a good read."

Software Evangelist: "using fervor and zeal (but never money) to convince software developers to create products for a computer with no installed base, 128k of RAM, no hard disk, no documentation, and no technical support, made by a flaky company that IBM was about to snuff out."

Beta sites: "people who get beta or pre-release copies of software so that they can feel important."

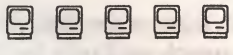
Shrink-wrapping: "...bar mitzvah for software."



CompuServ: "...the closest thing to dating for a nerd."

PageMaker: "...an act of God specifically intended to save Apple."

Dark Castle: "...has caused more loss of productivity than any other Macintosh product to date." (Ed: Guy hasn't played Arkanoid!)

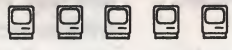


Beta: "abbreviation for the phrase 'beta than nothing'."

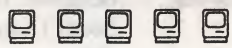
Chutzpah: "...someone who pirates software then calls the company to complain that there are bugs in it."

Mutual nondisclosure agreement: "...you and Apple agree not to divulge each other's secrets. Also, in practice, it means Apple can leak all it wants and you can't do anything about it."

Windows: "...an operating environment that attempts to turn a real computer into a cute, graphics toy.



Esther Dyson's computer conference: "an annual gathering where computer industry people pay $1000 each to listen to other computer industry people brag about how smart they are and to talk to people they can't stand seeing outside of the conference."



PostScript: "...the technical term for a lucrative royalty stream from Apple to Adobe."

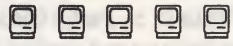
Dating: "...when two people go someplace where there are no computers, talk about anything except computers, and do analog stuff afterwards."

Bug: variously described by ACIUS as an anomaly, by Claris as an unexpected result, by Microsoft as a wrongful termination, and by Apple as an undocumented feature. (Ed: No one calls it a bug except users.)

Crash: "...when your competitor's program dies. When your program dies, it is an 'idiosyncrasy'."

ID: "...abbreviation for idiosyncrasy, and the number that follows indicates how many more months of testing the product should have had."

MIS: "...stands for Meshugas-Information System, ...Yiddish for crazy or nuts."



SCSI: "...a port or orifice on the Macintosh. Thus, 'all men are SCSIs' is an adaptation of a frequently heard phrase when single women get together."

MultiFinder: "...system software that Apple provides so that you can crash in more than one application at once."

A SHORT GLOSSARY OF COMPUTER JARGON

Demented Definitions for Computer Crazies—"If not the Devil's Dictionary, at least the Imp's insight."

by Joe Kelley

Computerese (which see) embraces many terms which can confuse inductees in the electronic army of the computer equipped. While this author doesn't know whether this work should appeal to the spirit of Sam Johnson or Humpty Dumpty, he does hope they will both smile at the definitions.

What follows is a series of whimsical explanations of the terms used in computerese. Good taste will not be found among them. Let the reader beware.

A: (The first letter of the alphabet) A is for Apple.

AI: n. (Acronym for Artificial Intelligence) An attempt to provide artificially what is absent naturally from data processing directors (which see).

Apple: n. A fruit used by Eve in the Garden of Eden to make a mess of things and by the California computer firm that brought the world the Apple /// and the Lisa.

A slightly used apple.

Application: n. A piece of software alleged to have socially redeeming value.

A socially redeeming application.

ASCII: n. (Pronounced A..KEY) **1.** The cuneiform of computers. **2.** The Esperanto of the computer world.

AT&T: n. Acronym for Ma Bell of late, lamented fame.

Back Door: n. A more mundane name for a Trojan Horse (which see).

BASIC: (Acronym for Beginners All-purpose Simplified Instruction Code) n. **1.** The world's worst programming language. **2.** The world's most widely used programming language.

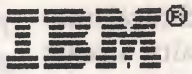
Baud: n. A particularly sexy measure of speed in telecommunications. 300, 1200, and 2400 (the raciest!) baud being the most widely available flavors. Divide by ten to get the approximate characters per second, if you care. Used in the bawdy phrase: "Byte my baud."

BBS: n. (Bulletin Board System) A (micro)computer running software which allows remote access across telephone lines and providing a message base and file transfers. The electronic equivalent of the cork board in the local supermarket.

Bells and Whistles: n. Fancy but useless features of a system which drive the price up and confuse the purchaser into thinking it is worth paying for.

BetaWare: n. Software which the user is supposed to debug (which see). Same as application (which see).

Big Blue: n. Nickname for condition of IBM stockholders after three years of poor profits.



Print this logo in blue!

BIOS: n. (Basic Input/Output System) The ignorant opinion that only IBM computers should be purchased.

Bit: n. **1.** The basic unit of computer storage. Symbolized as a "1" or a "0" or as an "on" or an "off," or as a "maybe I know," or "maybe I don't know"; **2.** The Morse code of computers.

Bit-Map: n. An itty-bitty diagram, too small to be read.

Bomb: n. **1.** A bad idea produced by software and deliberately inserted into it by programmers to justify their continued employment. **2.** A hiccough of the operating system.

Don't loose your data when the bomb goes bing!

Buffer: n. Something needed to reduce acid indigestion when output (which see) is first late and then wrong.

Bug: n. **1.** The cockroach of the computer world. **2.** Unplanned feature (which see).

Burn In: n. (Said of computer screens) The ghosts of departed pixels.

Is this bug eating your data?

Buzzwords: The substitution of jargon for thought.

Byte: n. **1.** The basic unit of misinformation. **2.** A set of eight bits which are mistreated as a unit. Sometimes roughly equivalent to a character on a typewriter keyboard, depending.

Cache Memory: n. A location in memory where needed information is stached away and forgotten.

CAD/CAM: n. To use the computer to speed up poor design or manufacturing in order to save money.

Camera Ready: adj. A state of misdesign which can be turned over to the printer.

Character: n. An office weirdo.

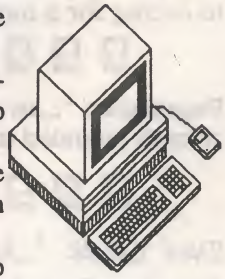
Chart: n. A pictorial guide to errors.

Clip Art: n. Useful art stolen from someone else.

COBOL: n. A small group of programmers determined to drive you crazy.

Code: v. **1.** To translate a simple idea into an indecipherable language. **2.** To program. **3.** The machine language instructions which explain why the software doesn't work properly.

Compiler: n. A piece of software designed to be blamed for poor design of the application.



Compu$erve: n. An obscenely expensive network with many enticements to waste your money.

Computer: n. An electronic device designed to replace people but which doesn't work.

Computer Literate: adj. **1.** Able to missspell with a computer.

Computer Room: n. **1.** The shrine containing the holiest of holies. **2.** The Sanctum Sanctorum of the Data Processing Department complete with 20th century incense (air conditioning).

Computerese: n. **1.** The b.s. argot of the data processing world. **2.** A depraved form of speech used only by those too ignorant to be able to express themselves with words.

Consultant: n. **1.** A person who knows 100 ways to make love but doesn't know anyone of the opposite sex. **2.** A person who

borrows your watch and then tells you what time it is. **3.** A fraud masquerading as an informed expert. **4.** An unemployed creep looking for a job.

"May I borrow your watch?"

CPU: n. (Central Processing Unit) The field of battle in the DP world. A riot of little 0's and 1's fighting it out at the speed of light.

Crash: n. The electronic equivalent of a pile-up at the Indy 500.

CRT: n. (Cathode Ray Tube) The boob-tube of data entry.

Cycles: n. **1.** The run around. **2.** The number of times the computer can do nothing before it has to do something.

Cycles as advertised.

Data: n. The everyday substitute for information.

Cycles as real.

Data Entry Department: n. Group responsible for the arduous task of creating data errors.

Data Processing Department: n. The Vatican of authorized ritual.

DBase: n. (Abbreviation of debase) Software which will ingest vast amounts of misinformation and convert it into data to be used as input to another process with a similar end product.

A better way to manage your data!

DBMS: n. DeBased Management System (said of many MIS (which see) environments).

Debug: v. To locate the bugs in an application program or otherwise to do things which should have been done before the software was sold to the unsuspecting public.

DEC: v. To floor an IBM sales rep by buying a Vax.

Design: n. **1.** Planning. **2.** The missing component in software development.

Desktop Publishing: n. **1.** Ugliness at three hundred dots to the inch. **2.** The combination of the author's zealotry, the editor's misunderstandings, the typesetter's poor taste, and the paste-up artist's mistakes. (Ed Note: What?!)

Digit: n. The finger.

Digitize: v. To number until numbed and/or to make a verb from a noun.

Digitization: To give the finger to verbs and nouns.

Disk: n. Possibly a hard disk (which see) or a floppy disk (which maybe you should also see) or even maybe a diskette (yes, you had better see that one too).

Diskette: n. A place where data is lost. Can be hard or floppy (each of which see).

This a diskette.

Disk Drive: n. The juke box of computers playing the diskettes of data.

Documentation: n. The generally incorrect and always incomplete information provided by the manufacturer about a product.

This documentation is incomplete.

Dog and Pony Show: Phrase indicating event where all the bells and whistles (which see) are used.

Down: adj. The emotional condition of the DP Director when the computer is not functioning.

Download: v. (See Upload) To use telecommunications to illegally transfer software from a remote computer to your own.

Downtime: n. The minimum length of time exceeding your ability to wait for some useful output.

DP: n. (Data Processing) **1.** The jargon of an illiterate cult who are so inarticulate that they do not speak in words, grunts and letters being made to suffice. (See wookie.) **2.** The department responsible for mutilating information.

DPI: n. (Acronym for Dumbness Per Item) Basic measure of the stupidity of the output of a desktop publishing (which see) system.

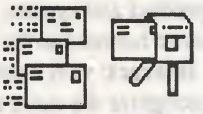
"You did this newsletter all by yourself?"

Dummy: n. A desktop publishing ingenue.

Dupe the Decks and Go!: Phrase used by crazed presidents of start up computer companies. Indicative of extreme inattention to details such as timeliness, accuracy, etc.

Duplex: n. **1.** A telecommunications phenomenon which comes in two flavors, full and half. In full duplex the remote computer echos what you type back to your computer. In half duplex, your computer talks to itself. **2.** In real estate, two for the price of one.

EBCDIC: n. (Pronounced EB-SA-DICK) Cuneiform according to IBM.


Electronic mail is so fast, it's obnoxious.

Electronic Mail: n. The paperless Post Office on your desktop.

E-Mail: Sort of like she male but only of the other sex (at least in England).

EPROM: n. (Acronym for Erasable Programmable Read Only Memory) A contradiction in terms.

Error Listing: n. Things your computer salesperson never told you.

Error Messages: n. The Delphic utterances of the 20th century's high tech toy, the computer.

Ethernet: n. A gaseous transmission medium moving 10 million little thingies a second and capable of moving massive amounts of inaccurate data. Will not transmit information.

Executive Meeting: n. A group grope with high tech trappings.

Expert System: n. Software intended to replace your boss.

Fault Tolerant: adj. An easy boss.

Feature: n. Planned bug. Features come in two flavors: documented (expected by the user and sometimes described in the documentation) and undocumented. The latter are often confused with unplanned bugs (which see).

File: n. A collection of misinformation which are treated as a unit by a computer. Files can be made up of data or program instructions (software) but it doesn't make any difference.

Flipped Bits: n. A condition in which small pieces of one's mind are individually driven crazy by random chance.

This is a floppy.

Floppy: n. Temporary home for itinerant data.

FORTRAN: n. A programming language which correctly gives the values to formulas incorrectly chosen to solve some problem.

FreeWare: n. The Off-Track betting of the computer world. Amateur, entertaining and risky.

Giga: Prefix meaning " a few."

Glitch: n. A bitch of a bug.

Graph: n. The picture worth a thousand numbers—all of them in error.

Graphic: 1. n. Electronic picture. 2. adj. The type of language used to describe the accuracy of typical output (which see).

Hacker: n. 1. A creep out to destroy your files. 2. Another system user.

Hard Disk: n. A rigid medium whirling around in a state of ecstasy.

Hardware: n. Computer junk which can be banged (referred to an "impact adjustment," which see) when it malfunctions. But see the entry before the computer malfunctions.

Hot Type: n. A stolen font family.

Hype: n. The standard substitute for help.

IBM: Popular chant meaning "I Bought a Macintosh."

I bought a Macintosh!

Information: n. The dream of decision makers and the nightmare of DP managers.

Input: n. 1. Misinformation fed to a computer at great cost. v. 2. To pour, drip or otherwise enter stuff so that it can be manipulated at great speed and even greater cost.

Impact Adjustment: The thrashing you always wanted to give that *#$+ing computer.

Integrated: adj. A cliché falsely applied to almost every product and system. The summum bonum of data processing, more honored in the breach than in the observance.

Interact: v. A word used by people whose vocabulary does not recognize the more specific terms: talk to, communicate with, meet and discuss.

I/O: An abbreviation for "I Owe!" Generally sighed.

This is Steve.
Steve is a millionaire.

Jobs, Stephen: n. The self-appointed designer of the NeXt computer after the last computer for the rest of us.

Junk: n. 1. Computer equipment. 2. Yesterday's MIS reports.

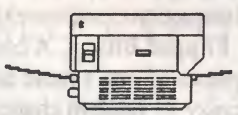
K: n. 1. the first letter of this author's last name. 2. One thousand.

Key Combination: n. An unrememorable collection of keys which must be depressed at the same time to achieve the effect of a mouse click. The Guinness Book of Records entry is the oft-used Command-Shift-Option-Alt-~~ - -l-Kneeonnumerickeypadd.

Kludge: v. 1. To jury rig. 2. The programmer-preferred technique for modifying software.

LAN: n. (Local Area Network) The office coffee klatch for data.

Language: n. An organized syntax of statements designed to mystify normal human beings.



Laser Printer: n. The single machine more responsible for the proliferation of bad design than anything since the invention of the printing press.

Lasercrud: n. 1. Documents produced by desktop publishing (which see). 2. Products of the Ransom Note School of Design.

Lexicographer: n. A madman who writes or compiles a dictionary.

LISP: n. An effeminate programming language designed to control your mind.

Log Off: v. To disconnect from a BBS according to proper procedures (as distinct from rudely turning the modem off).

Log On: v. To gain access to a BBS, sometimes legitimately.

Logic Bomb: n. A set of program instructions triggered by a specific event (such as a key stroke sequence) which can produce unsettling results such as suddenly erasing a hard disk.

Look and Feel: n. Touchy-feely in a copyright way.

Lotus: n. (After Eatin Lotus) The name of the college accounting teacher who volunteered his soul for the noted second generation electronic spreadsheet (which see).

Mac Graphic: n. Computerized pointillism at 72 daubs to the inch.

Machine Language: n. Programming instructions which can be understood by a machine but not by a human being.

Mag Tape: n. Akin to a tape worm (each of which see) and having approximately the same usefulness.

Mainframe: n. The great, big iron abacus of the computer world. Noted for being "down" (which see) when needed most.

Malfunction: n. The operation of a hardware or software according to the way it was built as distinct from the way it was advertised.

MTBR: n. (Acronym for Mean Time Before Repairs) The cube of the average length of time from malfunction until output is needed.

MTBF: n. (Acronym for Mean Time Between Failure) The square of the average length of time from when you must have output until you get it.

Mega: Prefix meaning "a couple."

Microcomputer: n. A jumble of silicon, plastic, and pixels small enough and cheap enough to do something useful, maybe.

Microfloppy: n. An embarrassingly small floppy.

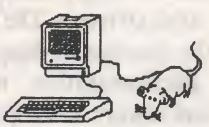
MIPS: n. MisInformation Per Second; basic measure of data processing.

MIS: n. Code name for DP (which see) adopted after large numbers of people began to realize that merely grinding numbers through silicon has no socially redeeming value.

This is a modem hiding underneath a tephone.

Modem: n. Acronym for Modulator-Demodulator. An electronic device for converting a computer's electronic thingies to an acoustical signal (modulation) which can be transferred over telephone lines and converted back (demodulation) by another modem to those mysterious thingies which micros love.

Monitor: n. A piece of hardware useful for viewing the destruction of one's data. Noted for pixels dancing on its face (head).


My Wonderful Computer

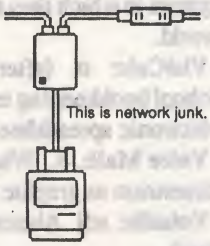
Mouse: n. A device used to avoid more productive employment (as in the phrase "mouse around" [here embarrassingly used as a verb]).

Mouse Click: n. 1. A nervous twitch of the finger designed to mean something. 2. Basic unit of effort on Macintosh computers; as in "It took me 712 mouse clicks to do this!"

MS-DOS: n. Acronym for Messy Style - Damaged Operating System.

Multiplexer: n. An expensive device for confusing streams of data bits. A cuisinart for little 0's and 1's.

Nanosecond: n. The length of time from when the light turns green and the jerk behind you beeps his horn.



Network: 1. v. To look for another job. 2. n. The spider's web of data distribution.

Network Administrator: n. God.

Network Topology: n. The complex of decisions about whom you speak to first, what you say, and what you admit to knowing.

Newsletter: n. Irrelevant graphics floating in a cesspool of poor writing dictated by worse design.

NeXt: n. A hardware company with a vaporware (which see) product.

Object Code: n. The result of feeding source code (which see) to a voracious compiler (which see).

Operating System: n. 1. Overbearing software which interferes with your intentions. 2. An overly complex program which you don't really want but which you must buy so that it can interfere with your application software.

Orphan: n. A child of a desktop publishing fanatic.

Output: n. Occasional substitute for information; its chief characteristics are that 1) it's late; and, 2) it's wrong.

Parameter: n. 1. A word that does **not** mean *boundary*. 2. Computerese for *boundary*.

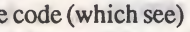
PARC: n. A not very green place south of San Francisco. A place not to be late at night.

Pascal: n. A programming language with nothing to do with the French mathematician after which it is named.

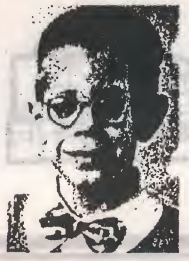
Phone Phreak: n. 1. An idiot with nothing to say but determined to say it long distance at Ma Bell's expense. 2. A system cost passed on to legitimate users.

Pica: n. A cheap typesetter.

Pixel: n. What angels were to heads of pins, pixels are to computer screens.


This is a pixel. Look really close, there isn't much to see.

Pixel Eater: n. A graphics crazed Mac groupy who displays a severe compulsion for or an electronic addiction to computerized pictures of thingies.


"What? Me worry?"

PL/1: n. A programming language (which see) so obscure that it is impossible to determine the intent of a program from an examination of its source code (which see).

Power Lunch: n. Equal parts of red ties, expensive food, snooty service and mutual flattery.

Power User: n. Someone who uses vastly powerful computers to run games.

Print Out: n. Output (which see).

A Programmer.

Programmer: n. 1. A person who explains to you why you can't have what you need. 2. The high priest of a low cult.

Programming: v. A personality conflict with a machine.

Programming Language: n. A system designed to obscure the intent of software (which see) from all but the highest paid consultants (which see).

PS/2: n. (Acronym for Personal System/2) A hardware product line without an operating system to allow its effective use.

QC: v. (Quality Control) To prevent the client from getting too much for his money.

Quark: n. An Irish eccentricity, thought to be a basic constituent of matter.

Resolution: n. 1. The degree of smallness needed so that you cannot see something. 2. A determination to look for it anyway.

Reverse Engineering: n. The process of design after construction. Used in software development.

ROM: n. (Acronym for Read Only Memory) The "look but don't touch" machine instructions.

RS-232C protocol: n. An industry-wide agreement which specifies whatever it is that really happens when signals of some incomprehensible kind are sent by a computer to a modem.

Rules: n. Skinny lines on the page. v. (To rule) The dream of every programmer.

Sans Serif: n. Arab programmer noted for his cooking.

Scanner: n. A character in a bizarre movie.

Screen Dump: When your program messes the bed and your monitor flushes the toilet.

SCSI: n. An acronym for Small Computer System Interface which is pronounced "sexy" before you get a virus and "scuzzy" thereafter.

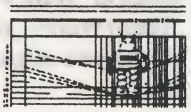
Security: n. The greatest myth of computers.

Sexed Quotes: n. Quotation marks shaped to 6699 match the outside edges of the number "69."

ShareWare: n. A "drive-before-you-buy" system for software for microcomputers. Originally devised by Diogenes. Believed to be the cause of many bankruptcies of start-up software companies.

Software: n. Computer junk which can only be cursed when it malfunctions.

Source Code: n. The statements of a program in a programming language which describe what the program is actually to do—well, sort of.



Spreadsheet: n. The soul of an accountant locked forever in a computer program.

Supercomputer: n. A large computer with 12 inch hard disks capable of great endurance.

Sweaty Palms: n. Proof that if God had meant us to use computers we would all have been born with silicon skin.

Sysop: n. System Operator (which see). 1. The person who can do things you can't do on a BBS. 2. The men's room attendant of the telecommunications world.

System Operator: n. Sysop (which see). 1. Individual responsible for flushing the electronic toilet of a BBS. 2. On large systems, the individual who interferes with your output.

Tape: n. Comes in four colors, red, green, magnetic, and worm.

TeaseWare: n. The simplified, error-free version of software which does nothing useful.

Technobabble: n. Writing or talking about computers.

Technocrap: n. Documentation (which see).

Technocrat: n. A jargon dispenser of the computerese kind.

Technonerd: n. A microcomputer owner with a compiler (which see) but without a word processor (which see also).

Technophile: n. (AKA Technofile) A place where MIT grads

are filed and forgotten.

Telecommunication: n. Computers chatting over telephone lines.

Template: n. **1.** Would-be software.

Terabyte: n. (From the Greek *Teras* or Monster) **1.** Minimum memory size to run any useful application. **2.** 10^{12} bytes. **3.** More than a few bytes.

Throughput: After the input (which see) and before the output (which see) there is this throughput (which you are seeing).

TIFF: v. An argument about scanner formats.

Time Bomb: n. **1.** A set of program instructions activated by the computer's internal clock. Known to occasionally increase computer anxiety by changing all the passwords on a system. (Not for the faint of heart.) **2.** Proof that computers can tell time better than people.

Tick, tick, tick.

Toner: n. The ink of laser printers. It's just that you can't stick a girl's braids in it.

Trojan Horse: n. (Back Door, which see) **1.** A set of instructions in a program which upon activation will allow unauthorized entertainments to occur. **2.** A technique used by banking systems programmers to increase their pay.

TRS-80: n. Acronym for Trash Eighty, an early microcomputer clunker.

Type: v. Instruction to a secretary (usually followed by a "!". n. The characters making up words (i.e., the office weirdos who gossip).

Unix: n. A user-vicious operating system praised by programmers in need of employment.

Upload: v. (See Download) **1.** To transfer a computer file from your computer to a remote one. **2.** Electronic publishing.

User: n. Victim.

User Friendly: adj. Cliché used in marketing software. Equivalent in substance to "Want some candy, little girl?"

This lolly pop tastes good.

VaporWare: n. **1.** Announced but undelivered software. **2.** IBM marketing strategy.

Virus: n. **1.** A piece of software designed to be activated without the knowledge of system user and capable of attaching a replica of itself to other files which will transfer the virus to any system to which they are moved. **2.** Poltergeists of the computer world.

VisiCalc: n. (after Irving Visicalc) The name of the high school bookkeeping teacher who volunteered his soul for the first electronic spreadsheet (which see).

Voice Mail:. n. When poison pen letters fail, this adds a new dimension to graphic communication.

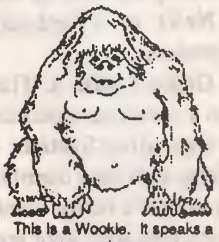
Volatile: adj. About to be destroyed (e.g., your most important data).

Weiner, Norbert: n. An early computer crazy.

Which See: v. Which see (which see).

Widow: n. Wife of a desktop publishing fanatic. Mother of his orphan (which see).

WIMP: n. **1.** Acronym for Windows, Icons, Mice, and Pointers. **2.** An IBMer's sneer at the Macintosh. **3.** The interface for the PS/2.


This is a Wookie. It speaks a strange language.

Wookie: n. **1.** A large and generally inarticulate subprimate species characterized by uneven personality development and a preference for letters and numbers over words. Noted for poor dress habits, its diet consists primarily of caffeine, sugar, salt and alcohol. **2.** A programmer (which see).

Word Processing: n. The puréeing of ideas into neatly typed pap.

Isn't word processing wonderful?

Worm: n. A piece of humorous software which slowly corrupts all of your files in random ways. Not useful for fishing.

WORM: (As distinct from Worm (which see), an acronym for Write Once Read Many) The data storage system for those who never needed erasers.

80286: n. The telephone number of someone in Lawrence.

80386: n. The telephone number of someone else in Lawrence.

Hey ...

does anyone have any info on a group called nuPrometheus? Whats the scoop? Is it true Mac ROM source code is floating around. This inquiring mind wants to know.

It's at least partially true. MacWeek as well as other publications and institutions got copies of the source code that the nuPrometheus League claimed they had.

The Macintosh Summertime Funtime Quiz

Andy Ihnatko

Ah, summer—those six golden weeks before Macworld! When the fan in your SE stops coating your Mac with chemical residue from the humidifier and starts blasting your motherboard with ambient beach sand.... Yessir, summer is coming soon... maybe *too* soon?

Between lazy days spent at the beach or checking the pH in your pool, it's too easy to fall behind in your knowledge of the Macintosh Universe... unless you quiz yourself periodically, of course! So go ahead and take the *Macintosh Summertime Funtime Quiz.* Circle the answers of your choice and then use the handy scoring guide at the end to find out how much you've forgotten. It's *just that simple!* Here we go!

1) "Obviously, color images should be our ultimate goal" was one of Steve Jobs' earliest quotes concerning:
   a) The video screen of the Macintosh
   b) The printing mechanism of the ImageWriter
   c) The first Macintosh tee-shirts

2) "They sure have been going up pretty fast, haven't they?" was John Sculley's comment about the:
   a) Cost of one-megabyte SIMMs
   b) Sales of the Mac II
   c) Flammability of the Mac SE

3) HyperCard stackware is a fantastic solution for people who:
   a) Have problems with organizing information
   b) Have ideas to present in a dynamic new way
   c) Have just *too much* free space on their hard drives

4) The ironclad argument many executives sometimes must use to convince their companies to purchase Mac II systems is:
   a) "Powerful software like Apple's own MultiFin der means we can do two things at once, thus doubling our productivity!"
   b) "With an easy-to-install AppleTalk network, the entire office can share peripherals and data, making management of projects and information quick and simple."
   c) "For $800 more, we can make it IBM compat- ible."

5) Macintosh programmers think the best feature of "Inside Macintosh" is:
   a) The exhaustive coverage of the Toolbox makes it the definitive sourcebook for professional software developers
   b) Its handy index makes finding individual topics a breeze
   c) The paperback binding makes pounding your head against it over and over again *significantly* less painful

6) When asked to name the dream piece of high technology that they would like to own, most people say:
   a) "The Macintosh IIx, because of its high speed and excellent graphics"
   b) "A read/write CD ROM drive—I think I would find such a fast and sophisticated mass-storage device useful"
   c) "George Jetson's flying saucer. You know...the one that folds up and turns into a briefcase"

7) The proliferation of X-rated MacPaint graphics on American bulletin-board systems only goes to prove that:
   a) Acceptance of rights of Free Expression are widespread enough to allow system operators to set their own individual policies
   b) America's morals are low enough to allow such shameless smut to be available to unwary BBS users
   c) Twelve-year-old boys' weekly allowances are enough to allow them to buyThunderScans

8) If a national computer magazine reviews ten new programs, and nine of them receive the magazine's highest rating, it's:
   a) Due to the tendency of all Macintosh programs to be nothing less than sterling pieces of efficient, fast, easy-to-use software
   b) Due to thorough documentation and exemplary phone support , which make up for any shortcomings in the programs themselves
   c) A typical issue

9) Readers await each one of John Dvorak's "The Devil's Advocate" columns with:
   a) Breathless anticipation
   b) A throaty chuckle, remembering last month's lively column
   c) Plane tickets to California and automatic firearms at the ready

10) The typical Macintosh programmer physically resembles:
   a) Bill Atkinson
   b) Bill Gates
   c) Bill the Cat

11) Jack Tramiel's promotion of the Atari ST in international markets has earned him:
   a) Accolades from his peers in the computer industry
   b) Respect and admiration from his coworkers at Atari
   c) Death threats from five of the seven continents

12) The complexity of the Macintosh Toolbox routines and the difficulties they present to new programmers suggest that:

a) The price for a consistent user interface is longer software development time
b) A radically new style of computer requires a radically new style of programming
c) Satan not only really exists; he's also one of Apple's top-ranking system engineers

13) A Macintosh enthusiast's reaction to the breakdown of a Mac Plus after only one week of use would most likely be:

a) "You have to expect a few 'Bad Apples'...ha ha ha!"
b) "Apple's expert technical support dudes will be certain to correct the problem in a meticulous, efficient, and courteous manner!"
c) "Think about how much more quickly and easily the Mac did it, compared to the IBM PC!"

14) Which group is paying the closest attention to the activities of Steve Jobs's NeXT corporation:

a) Universities
b) Small businesses
c) The Securities and Exchange Commission

15) A software virus is:

a) The work of a few demented and depraved individuals
b) The over-rated instigator of a lot of needless panic and hysteria
c) Just another alibi to use when you're hopelessly late with a project

16) Which of the following is the best indication that shutting down your Mac and taking a ten-minute break would be a good precaution:

a) Your hard drive has begun to make loud clattering noises
b) You detect the faint odor of overheated electronic components
c) Excel's macro language is actually starting to make sense to you

17) Which of the following is the single greatest hazard to hard drives today:

a) Viruses
b) Electrical power surges
c) Software that allows you to install 500 desk accessories and 200 fonts all at once

18) Bill Gates chose the state of Washington as the site for Microsoft's home offices because of which of the following factors:

a) Proximity to Silicon Valley
b) Low cost of office space
c) Low drinking age, which means beer can legally be served to management and staff at company parties

19) If Steve Wozniak were to write his autobiography, he might be able to call it:

a) *An Apple in the Rough*
b) *A Dream, a Garage, a Volkswagen: An American Success Story*
c) *I Could Slip a Hundred-Dollar Bill Inside Every One of These Books, Buy Canada , and Still Have More Money Than You Could Ever Hope to Make in a Million Years*

20) In 1972, most of the members of the original Macintosh Development Team were:

a) Doing systems programming for IBM mainframes
b) Completing work on yet another engineering degree
c) Following the Grateful Dead's cross-country tour in a psychedelic Volkswagen microbus

21) Playing Canfield is widely agreed to be:

a) Hours of wacky, nonstop fun-a-plenty
b) A sure way to gain an understanding of the subtle strategies of Solitaire
c) A standard by which we can measure a man's capacity for humiliation and frustration

22) At last year's Macworld Exposition—Boston, attendees spent most of their money:

a) Buying the very latest in hardware and software
b) Registering for the many mesmerizing hands-on conferences
c) Paying cab fare between the three Expo sites

23) Cardholders think the best thing about Apple Credit is:

a) Its convenient system of monthly payments
b) All national Apple computer dealerships' honoring it for purchases
c) Use of Radio Shack's "Battery of the Month Club" card as an acceptable credit reference for approval

24) Many Macintosh SE and Macintosh Plus owners are upgrading to the Mac II, unable to resist the lure of:

a) Vastly increased speed
b) Greater memory and broader hardware expansion possibilities, through the use of NuBus slots
c) 256 color PICT files of Kim Basinger

25) College students make their Macintosh systems pay off by:

a) Using second-generation laboratory simulation software to model scientific experiments
b) Using professional-level CAD software to experiment with various electronic and mechanical design ideas
c) Using PageMaker and a LaserWriter to forge the Dean's office stationery

26) Sometime in the next two years, the Macintoshes seen in hit TV shows such as "Moonlighting," "Dallas," and "Night Court" will:

a) Be proven to have resulted in greater profits for Apple
b) Be seen to improve the image of the Macintosh name
c) Be plugged in and actually *used* in an episode by one of the characters

27) Aldus's next release of PageMaker will be:

a) Geared more to the professional graphic designer than to the casual desktop publisher
b) Easier to use in an AppleShare environment
c) Twice as expensive and require three times as

much memory

28) The spirit that has influenced every one of Apple's corporate decisions through the years and has led Apple into becoming one of the leading high-tech businesses of today is the indefatigable spirit of:

a) The Woodstock Generation, which leads Apple to strive ever upward to put exotic technology to work helping mankind

b) The American "Can-Do!" ethic, which drives employees to work harder and harder to reach their goals

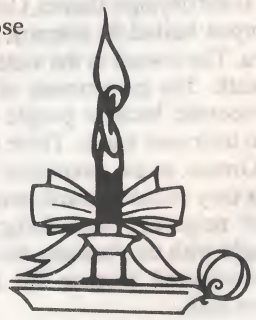
c) Elvis Presley, who has an office in Cupertino bigger than Sculley's

SCORING:

The answer to every question is "C," except for those that are "A." For all other questions, the correct answer is "B."

For every correct answer, give yourself some points. For every incorrect answer, give yourself some points, but not as many points as you would have gotten if the answer were right.

If you cheated and skipped right ahead to this section *first*, you obviously need any small win you can get. Give yourself more points than the folks who got all the questions right would have gotten. Go out into the world, buy yourself something nice, and eat a little something before going to sleep, secure with the smug knowledge that you bamboozled the rest of America. ■



PC software on a Mac ...

a quick summary of SoftPC

From: Tom Cole

Someone asked some questions about SoftPC, to which I reply:

1 SoftPC will only run on an SE if you have an accellerator installed. I don't know what accellerators it will work with, but it runs fine on my SE with a Radius 16 accellerator. It will *not* run on a stock SE or Plus as it makes use of 68020 instructions.

2. It also runs fine on a Mac II with no additional hardware.

3. It runs about as fast as your basic IBM PC/XT. Which is to say it is tolerable for many things, but pretty slow for big crunching programs.

4. Asks about CAD-type graphics. SoftPC (currently) only supports CGA graphics, which don't measure up for much beyond games, IMHO. So don't get too hepped up on graphics just yet.

5. If you are planning to run PC programs, you gotta solve one basic problem: how do you get the programs into your Mac?

The choices are -

a) buy a Dayna or Apple IBM drive, which SoftPC will recognize and use as the A: drive,

b) hook a serial line to your neighborhood PC and use a trick called SlavePC that comes with the SoftPC package that lets you use the PC's A drive as if it where on your Mac, but not too swiftly, or

c) download using Kermit-like things in a text-format file, and move them into the SoftPC domain using its ability to make a Mac folder be the E: drive.

6. It is a *very* compatible implementation of a PC. I can run SAS for the PC (about 14mb of stuff) and it runs flawlessly, though slowly. I run it on a 5mb Mac II and make a 1mb ram cache to my disk, which helps a lot.

7 You gotta have memory. An accellerated SE with 2.5mb is a minimum, and a 5mb system will make it run at about optimal speed. This appears to be because enourmous tables (state machine?) are loaded into memory to drive the 8086 emulator, and they eat space.

CONCLUSION

I already had the hardware, and needed access to a PC to be able to run SAS, so the $600 investment was cheaper than going out and buying a PC/XT clone with a hard disk. If you don't have the hardware yet (not enough memory or accellerator) then it can be a pretty expensive way to get access to PC technology. For what I needed, it was a perfect solution. I like it.

The World According to Student Bloopers

by Richard Lederer (St. Paul's School)

(This article was taken from SDMUG PD Disk Mar89-3, "Student Bloopers")

Note from author: I obtained this text file at an education conference. Copies were distributed to all in attendance to promote a forthcoming book by Mr. Lederer. I hope you enjoy it as much as I did. I laughed until tears came to my eyes.

One of the fringe benefits of being an English or History teacher is receiving the occasional jewel of a student blooper in an essay. I have pasted together the following "history" of the world from certifiably genuine student bloopers collected by teachers throughout the United States, from eight grade through college level. Read carefully, and you will learn a lot.

The inhabitants of ancient Egypt were called mummies. They lived in the Sarah Dessert and traveled by Camelot. The climate of the Sarah is such that the inhabitants have to live elsewhere, so certain areas of the dessert are cultivated by irritation. The Egyptians built the Pyramids in the shape of a huge triangular cube. The Pramids are a range of mountains between France and Spain.

The Bible is full of interesting caricatures. In the first book of the Bible, Guinesses, Adam and Eve were created from an apple tree. One of their children, Cain, once asked, "Am I my brother's son?" God asked Abraham to sacrifice Isaac on Mount Montezuma. Jacob was a patriarch who brought up his twelve sons to be patriarchs, but they did not take to it. One of Jacob's sons, Joseph, gave refuse to the Israelites.

Pharaoh forced the Hebrew slaves to make bread without straw. Moses led them to the Red Sea, where they made unleavened bread, which is bread made without any ingredients. Afterwards, Moses went up on Mount Cyanide to get the ten commandments. David was a Hebrew king skilled at playing the liar. He fought with the Philatelists, a race of people who lived in Biblical times. Solomon, one of David's sons, had 500 wives and 500 porcupines.

Without the Greeks we wouldn't have history. The Greeks invented three kinds of columns—Corinthian, Doric and Ironic. They also had myths. A myth is a female moth. One myth says that the mother of Achilles dipped him in the River Stynx until he became intollerable. Achilles appears in The Illiad, by Homer. Homer also wrote The Oddity, in which Penelope was the last hardship that Ulysses endured on his journey. Actually, Homer was not written by Homer but by another man of that name.

Socrates was a famous Greek teacher who went around giving people advice. They killed him. Socrates died from an overdose of wedlock.

In the Olympic Games, Greeks ran races, jumped, hurled the biscuits, and threw the java. The reward to the victor was a coral wreath. The government of Athens was democratic because people took the law into their own hands. There were no wars in Greece, as the mountains were so high that they couldn't climb over to see what their neighbors were doing. When they fought with the Persians, the Greeks were outnumbered because the Persians had more men.

Eventually, the Ramons conquered the Greeks. History calls people Romans because they never stayed in one place for very long. At Roman banquets, the guests wore garlics in their hair. Julius Caesar extinguished himself on the battlefields of Gaul. The Ides of March murdered him because they thought he was going to be made king. Nero was a cruel tyranny who would torture his poor subjects by playing the fiddle to them.

Then came the Middle Ages. King Alfred conquered the Dames, King Arthur lived in the Age of Shivery, King Harold mustarded his troops before the Battle of Hastings, Joan of Arc was cannonized by Bernard Shaw, and victims of the Black Death grew boobs on their necks. Finally, Magna Carta provided that no free man should be hanged twice for the same offense.

In midevil times most of the people were alliterate. The greatest writer of the time was Chaucer, who wrote many poems and verses and also wrote literature. Another tale tells of William Tell, who shot an arrow through an apple while standing on his son's head.

The Renaissance was an age in which more individuals felt the value of their human being. Martin Luther was nailed to the churh door at Wittenberg for selling papal indulgences. He died a horrible death, bing excommunicated by a bull. It was the painter Donatello"s interest in the femal nude that made him the father of the Renaissance. It was an age of great inventions and discoveries. Gutenberg invented the Bible. Sir Walter Raleigh is a historical figure because he invented cigarettes. Another important invention was the circulation of blood. Sir Francis Drake circumcised the world with a 100-foot clipper.

The government of England was a limited mockery. Henry VIII found walking difficult because he had an abbess on his knee. Queen Elizabeth was the "Virgin Queen." As a queen she was a success. When Elizabeth exposed herself before her troops, they all shouted, "hurrah." Then her navy went out and defeated the Spanish Armadillo.

The greatest writer of the Renaissance was William Shakespear. Shakespear never made much money and is famous only because of his plays. He lived at Windsor with his merry wives, writing tragedies, comedies and errors. In one of Shakespear's famous plays, Hamlet rations out his situation by relieving himself in a long soliloguy. In another, Lady Macbeth tries to convince Macbeth to kill the King by attacking his manhood. Romeo and Juliet are an example of a heroic couplet. Writing at the same time as Shakepear was Miguel Cervantes. He wrote Donkey Hote. The next great author was John Milton. Milton wrote Paradise Lost. Then his wife died and he wrote Paradise Regained.

During the Renaissance America began. Christopher Columbus was a great navigator who discovered America while cursing about the Atlantic. His ships were called the Nina, the Pinta, and the Santa Fe. Later, the Pilgrims crossed the Ocean, and this was known as Pilgrims Progress. When they landed at Plymouth Rock, they were greeted by the Indians, who came down the hill rolling their war hoops before them. The Indian squabs carried porpoises on their back. Many of the Indian heroes were killed along with their cabooses, which proved very fatal to them. The winter of 1620 was a hard one for the settlers. Many people died and many babies were born. Captain John Smith was responsible for all this.

One of the causes of the Revolutionary Wars was the English put tacks in their tea. Also, the colonists would send their parcels through the post without stamps.

During the War, the Red Coats and Paul Revere was throwing balls over stone walls. The dogs were barking and the peacocks crowing. Finally, the colonists won the War and no longer had to pay for taxis.

Delegates from the original thirteen states formed the Contented Congress. Thomas Jefferson, a Virgin, and Benjamin Franklin were two singers of the Declaration of Independence. Franklin had gone to Boston carrying all his clothes in his pocket and a loaf of bread under each arm. He invented electricity by rubbing cats backwards and declared, "A horse divided against itself cannot stand." Franklin died in 1790 and is still dead.

George Washington married Martha Curtis and in due time became the Father of Our Country. Then the Constitution of the United States was adopted to secure domestic hostility. Under the Constitution the people enjoyed the right to keep bare arms.

Abraham Lincoln became America's greatest Precedent. Lincoln"s mother died in infancy, and he was born in a log cabin which he built with his own hands. Wen Lincoln was President, he wore only a tall silk hat. He said, "In onion there is strength." Abraham Lincoln wrote the Gettysburg Address while traveling from Washington to Gettysburg on the back of an envelope. He also freed the slaves by signing the Emasculation Proclamation, and the Fourteenth Amendment gave the ex-Negroes citizenship. But the Clue Clux Clan would torcher and lynch the ex-Negroes and other innocent victims. It claimed it represented law and odor. On the night of April 14, 1865, Lincoln went to the theater and got shot in his seat by one of the actors in a moving picture show. The believed assinator was John Wilkes Booth, a supposingly insane actor. This ruined Booth's career.

Meanwhile in Europe, the enlightenment was a reasonable time. Voltare invented electricity and also wrote a book called Candy. Gravity was invented by Isaac Walton.

It is chiefly noticeable in the Autumn, when the apples are falling off the trees.

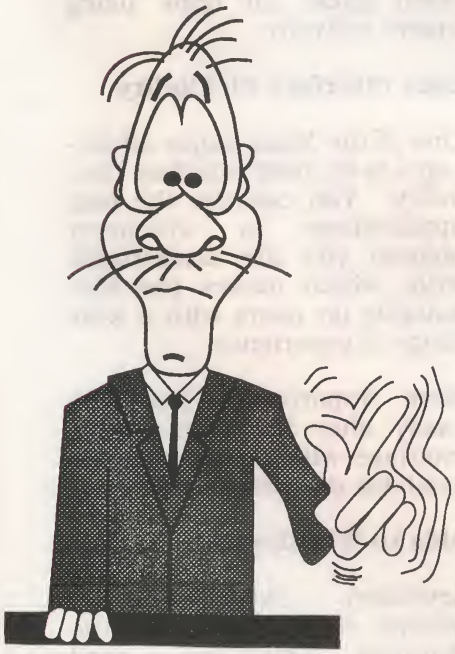
Bach was the most famous composer in the world and so was Handel. Handel was half German, half Italian, and half English. He was very large. Bach died from 1750 to the present. Beethoven wrote music even though he was deaf. He was so deaf he wrote loud music. He took long walks in the forest even when everyone was calling for him. Beethoven expired in 1827 and later died for this.

France was in a very serious state. The French Revolution was accomplished before it happened. The Marseillaise was the theme song of the French Revolution, and it catapulted into Napoleon. During the Napoleonic Wars, the crowned heads of Europe were trembling in their shoes. Then the Spanish gorillas came doen from the hills and nipped Mapoleon's flanks. Napoleon became ill with bladder problems and was tense and unrestrained. He wanted an heir to inherit his power, but Josephine was a baroness, she couldn't bear children.

The sun never set on the British Empire because the British Empire is in the East and the sun sets in the West. Queen Victoria was the longest queen. She sat on a thorn for 63 years. Her reclining years and finally the end of her life were exemplatory of a great personality. Her death was the final event which ended her reign.

The nineteenth century was a time of many great inventions and thoughts. The invention of the steamboat caused a network of rivers to spring up. Cyrus McCormick invented the McCormisk raper, which did the work of a hundred men. Samuel Morse invented a code of telepathy. Louis Pasteur discovered a cure for rabbis. Charles Darwin was a naturalist who wrote the Organ of the Species. Madman Curie discovered radium. And Karl Marx became one of the Marx brothers.

The First World War, caused by the assignation of the ArchDuck by a surf, ushered in a new error in the anals of human history.



The Pacific Stock Exchange in San Francisco has applied to the Commodities Futures Trading Commission to begin trading in memory chips or DRAMs. The PSE hopes to control price volatility or wide fluctuations.

Critics say chip manufacturing is not the same as agricultural production which is influenced by random factors such as weather and plant disease.

The PSE is nevertheless not convinced and cites that interchangeability without regard to source is its criterion.

For instance, the 256K chip can be sourced from 17 manufacturers.

The big buyers of DRAMs say trading in chips is not necessary because their purchase price is under control because they have long term contracts.

We, the end users believe that they are the same people who jack up their prices when supply is low.

This in turn forces the smaller buyers to bid higher. Guess who finally has to foot the bill?

Courtesy Microlines

Giving Up The Mouse

article

courtesy of AUSOM

Are you addicted to the mouse? The mouse makes learning your Mac easy, but the warm feelings you get from moving the mouse around may now be detrimental to your productivity. If you know the keyboard well, but still frequently use the mouse, then you are probably a mouse addict.

Mac users who are keyboard proficient (not me) find moving their hands to use the mouse inconvenient. Moving your hands to the mouse can interrupt the workflow. This is particularly relevant to keyboard-intensive applications such as word processing, data entry and spreadsheet .

What a Mouse is For

The mouse is for three main tasks:

- Selecting menu items and completing dialog boxes;
- Moving the pointer around within windows and selecting information;
- Manipulating objects on the screen, such as moving icons in Finder or using graphics and desk-top-publishing applications.

First Stage of Mouse Withdrawal

The first step to mouse withdrawal involves using keyboard shortcuts to replace selecting menu items and completing dialog boxes. Giving the mouse up to this level makes major productivity gains, as it reduces significantly the distance you must move the mouse to perform tasks such as print, make text bold or select a range of cells.

Many applications aid this by labelling particular menu items with keyboard shortcuts that use the command key. Pressing the illustrated command key combination activates that menu item. Using command key shortcuts is definitely quicker than pull-down menus, even if your hands are shaky from mouse withdrawal symptoms.

Some applications extend the range of tasks you can perform from the keyboard by assigning them to command with shift key or command with option key combinations. It can add up to a bewildering array of keyboard commands, reminiscent of less graceful computer systems.

However, one thing the Mac gives you is choice, you don't have to learn dozens of key combinations to use Mac applications. You learn only those that you use frequently, and then only if you want to.

Second Stage of Mouse Withdrawal

The second stage of mouse withdrawal requires you to learn to move around windows and select information with the keyboard. The productivity gain you'll get depends on the application.

Within spreadsheets and databases, the pointer can move only to highly defined positions. Using the keyboard to move from cell to cell or field to field is easy and quick. You probably do it already.

Within text based applications, where the I beam pointer can go almost anywhere, using the keyboard is a little more difficult. You have to learn a larger number of keyboard combinations to gain the same flexibility. Touch typists though, generally feel learning these key combinations worthwhile.

Within graphics and other object-based applications, the keyboard is a waste of time for moving the pointer around, unless you want to move very small distances. To do this you can use an excellent Mac facility called **Easy Access**, which is described in the Macintosh System Software Guide. **Easy Access** allows you to move the pointer pixel by pixel with the keyboard.

Third Stage of Mouse Withdrawal

It is not worth trying the third stage of mouse withdrawal, using the keyboard to manipulate objects and perform other free-form actions. This is what a mouse is best at and you have to have some fun while working.

There is one exception to this, if you are performing the same mouse movements a large number of times. Then it may be worthwhile to record these movements and play them back; all done using macro software.

User Interface Flexibility

One of the Macs major advantages is its user-interface flexibility. You can use the best applications in whichever fashion you are comfortable with, which makes the Mac suitable for users with a wide range of experience.

More importantly, you can easily alter the Mac's user-interface with some currently available utilities.

Aids to Withdrawal

Keyboard shortcuts are always documented in the manuals. These are a good

first source. Many Mac magazines have hints and tips columns that often present undocumented keyboard shortcuts. There are also DAs that provide simple listings of keyboard shortcuts for some applications such as MS Word and SuperPaint.

Experimentation is another way of learning keyboard shortcuts. It is sometimes quicker than looking through documentation, and satisfying when you learn something new.

There are three utilities that help you with your mouse addiction. They allow you to assign a wide range of mouse actions to particular keyboard shortcuts. These utilities are **QuicKeys** from CE software, **Tempo II** from Affinity Microsystems and **MacroMaker** in Apple's System 6 package.

QuicKeys is best for weaning you away from the mouse because that is what it concentrates on. (See the review 'Freedom from the Mouse' in January 1988 US MacWorld.) The utility **ResEdit** allows you limited control over keyboard shortcuts, but it is ground where angels fear to tread.

These utilities offer a wide range of paths for giving up the mouse. At the simplest level you can assign keyboard shortcuts to your favourite DAs.

Customising Your Applications' Interface

More importantly, they allow you to customise the interface of your favourite applications. For example, you can extend the range of keyboard shortcuts available for many lesser endowed applications. Finder and MS Works are two good applications that benefit from this treatment.

With a little more imagination, you can customise your applications so that they all have the same keyboard shortcuts for the same or similar features. Macintosh developers have been doing this for some time, but only to a limited extent. You can extend this concept to its conclusion.

A good approach is to find an application that you use frequently, and that has a wide range of keyboard shortcuts, to use as your keyboard-shortcut standard. Microsoft applications provide good candidates.

Using one of these utilities (**QuicKeys** is the best), create the necessary sets of keyboard shortcuts for all the applications you use. All these utilities allow you to create separate sets that only become effective when you start up each application.

Don't worry if the application has conflicting keyboard shortcuts, like the one between MacWrite and other applications over command-P. The keyboard shortcuts you create with these utilities normally override those built into the program.

Once you have done this, you may find it useful to create a cheat sheet that lists your most frequently used keyboard shortcuts and place it beside your Mac. This cheat sheet also helps you avoid accidentally assigning conflicting key combinations to the same function.

Keyboard Shortcuts and Graphics Applications

Graphics programs and other mouse intensive applications can also benefit from lots of keyboard short cuts, but only if you use **Easy Access** to allow one hand to stay reassuringly on the mouse.

When you turn on **Easy Access**, you no longer need to hold down two or three keys simultaneously to execute a keyboard shortcut. You can press these keys in a sequence. This makes it possible to execute the most complicated keyboard shortcuts with one hand.

Yes, It Is Worth The Effort

All this mucking around with **QuicKeys** to establish keyboard shortcuts has the distinct odour of 'hacking'. However, **QuicKeys** and other utilities are easy to use. It doesn't take much time invested in establishing a standard interface to your applications to quickly feel the benefits.

These benefits come in the form of less effort required to remember how to use particular applications and in the smooth workflow that results from keeping your hands on the keyboard.

Face up to it, you are probably addicted to your mouse. But the first step in controlling an addiction is recognising its existence. Now you can be more productive with your Mac by keeping your hands on the keyboard, avoiding fixes of mouse contact.

RULES OK!

Some very sound advice from our friends at Ausom

IIGS News Flash

We now have new

Software Stock

and with a

NEW CHEAP PRICE

$7

New IIGS System disk

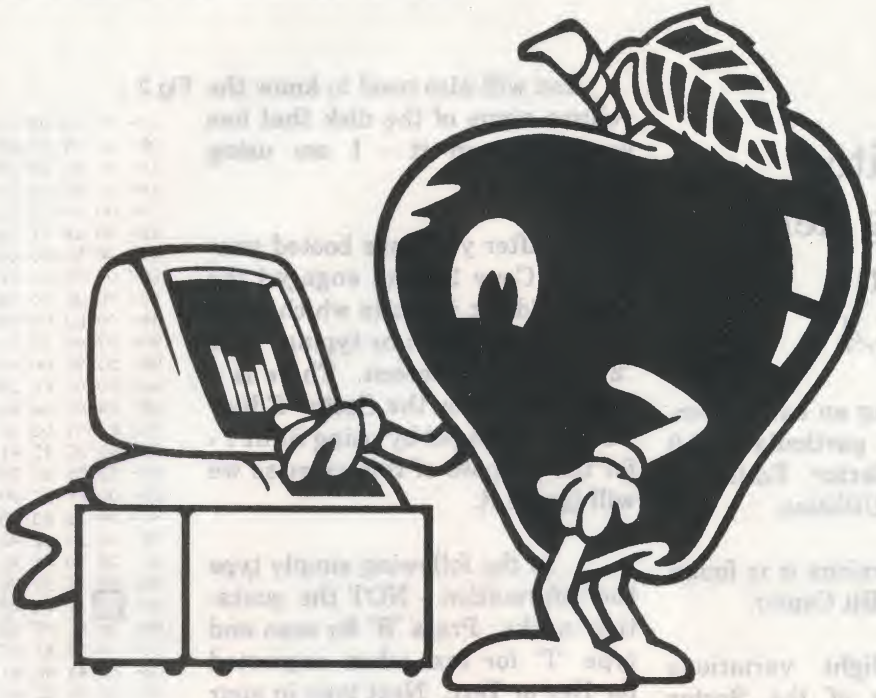
and

Fancy fonts

All IIGS & Mac Public Domain Disk $7 each

All Apple II & IIc Public Domain Disk $4 each

Apple Info



November - December 1989

Using the Sector Editor	84
New Library disks	85
Fontastic News	85
Hanging Apple Mystery	86
Moon walk	86
For your Eyes Only	87
DOS CALLS & POKES	89
OPCODES	89
Apple Wallpaper	90
Apple II Stamps	91
DB Master Professional	92
Apple Q & A	94
Appleshare and the AppleII	101

USING THE SECTOR EDITOR TO CHANGE FONT TYPES

Wal Glynn

The Sector Editor I am using here is found on Copy 2+ 8.4

If you are using an earlier version of Copy 2+, particularly 6.0 and less, the Sector Editor is found among the Utilities.

On Prodos versions it is found in the area of the Bit Copier.

There are slight variations between versions of the Sector Editor but if you follow the information displayed on the screen you will not have difficulty.

Fig 1

```
00- 00 00 03 00 F6 41 55 47  ....vAUG
08- 2E 39 32 00 00 00 00 00  .92.....
10- 00 00 00 00 00 00 00 00  ........
18- 00 00 00 00 36 B3 26 0C  ....63&.
20- 00 00 C3 27 0D 0F 00 06  ..C'....
28- 00 18 01 26 50 52 4F 44  ...&PROD
30- 4F 53 00 00 00 00 00 00  OS......
38- 00 00 00 FF 08 00 20 00  ..... .
40- 7D 3C 00 36 B3 34 0D 07  }<.634..
48- 00 E3 00 00 09 B1 0B 08  .c...1..
50- 02 00 27 53 54 41 52 54  ..'START
58- 55 50 00 00 00 00 00 00  UP......
60- 00 00 FC 28 00 04 00 2B  ..|(...+
68- 04 00 36 B3 2D 0C 07 00  ..63-...
70- E3 01 08 36 B3 32 0D 02  c..632..
78- 00 2C 42 41 53 49 43 2E  .,BASIC.
80- 53 59 53 54 45 4D 00 00  SYSTEM..
88- 00 FF 2C 00 15 00 00 28  .....,(
90- 00 36 B3 33 0C 07 00 21  .633...!
98- 00 20 0E AB 1E 00 02 00  . .+....
A0- 2B 50 41 4C 41 54 49 4E  +PALATIN
A8- 49 2E 31 30 00 00 00 00  I.10....
B0- C8 40 00 07 00 C7 0A 00  H@...G..
B8- 36 B3 09 0D 07 00 E3 00  63....c.
C0- 00 5B B1 0C 12 02 00 2B  .[1....+
C8- 50 41 4C 41 54 49 4E 49  PALATINI
D0- 2E 31 32 00 00 00 00 C8  .12....H
D8- 47 00 08 00 2F 0D 00 36  G.../..6
E0- B3 09 0D 07 00 E3 00 00  3....c..
E8- 5B B1 0C 12 02 00 2B 50  [1....+P
F0- 41 4C 41 54 49 4E 49 2E  ALATINI.
F8- 31 34 00 00 00 00 C8 4F  14....HO

TRACK $00  SECTOR $0B   DOS 3.3
```

You will also need to know the volume name of the disk that has your fonts on it - I am using AUG.92.

After you have booted your copy of Copy 2+ and engaged the Sector Editor, indicate which drive your font disk is in by typing "1" or "2" at the first screen. There is a Help Screen on the Sector Editor which is engaged by using Shift ? - for the purpose of this exercise we will ignore it.

In the following simply type the information - NOT the quotation marks. Press "S" for scan and type "T" for text when requested for Hex or Text. Next type in your volume name - in my case "AUG.92" - and press Return. The program will search the disk until it finds the first instance of this information - mine was on Track 0, Sector B, and looks like Fig. 1.

This is the CATALOG track. Use the I,J,K, and M keys to move the cursor - use the M key to move down to the name of the first font - PALATINI.10.

Immediately after the name of the font there are four "00" bytes, the next byte is C8 - this is the byte that we have to change. On figure 1. above you will find this byte as B0 or the first on the line B0.

Move the cursor directly over this byte and press "H" for Hex (it is also possible to type text in this manner, but we need a hex byte). Type F7 and Return. Depending on the version of Copy 2+ you will need to escape from this phase - on my version I press "esc". You now have write this value to the disk. Press "W" and hit Return twice - there will be a small bit of disk drive activity and you have completed the task. Figure 2 shows how the completed task should look.

Fig.2

```
00- 00 00 03 00 F6 41 55 47  ....vAUG
08- 2E 39 32 00 00 00 00 00  .92.....
10- 00 00 00 00 00 00 00 00  ........
18- 00 00 00 00 36 B3 26 0C  ....63&.
20- 00 00 C3 27 0D 0F 00 06  ..C'....
28- 00 18 01 26 50 52 4F 44  ...&PROD
30- 4F 53 00 00 00 00 00 00  OS......
38- 00 00 00 FF 08 00 20 00  ..... .
40- 7D 3C 00 36 B3 34 0D 07  }<.634..
48- 00 E3 00 00 09 B1 0B 08  .c...1..
50- 02 00 27 53 54 41 52 54  ..'START
58- 55 50 00 00 00 00 00 00  UP......
60- 00 00 FC 28 00 04 00 2B  ..|(...+
68- 04 00 36 B3 2D 0C 07 00  ..63-...
70- E3 01 08 36 B3 32 0D 02  c..632..
78- 00 2C 42 41 53 49 43 2E  .,BASIC.
80- 53 59 53 54 45 4D 00 00  SYSTEM..
88- 00 FF 2C 00 15 00 00 28  .....,(
90- 00 36 B3 33 0C 07 00 21  .633...!
98- 00 20 0E AB 1E 00 02 00  . .+....
A0- 2B 50 41 4C 41 54 49 4E  +PALATIN
A8- 49 2E 31 30 00 00 00 00  I.10....
B0- F7 40 00 07 00 C7 0A 00  w@...G..
B8- 36 B3 09 0D 07 00 E3 00  63....c.
C0- 00 5B B1 0C 12 02 00 2B  .[1....+
C8- 50 41 4C 41 54 49 4E 49  PALATINI
D0- 2E 31 32 00 00 00 00 C8  .12....H
D8- 47 00 08 00 2F 0D 00 36  G.../..6
E0- B3 09 0D 07 00 E3 00 00  3....c..
E8- 5B B1 0C 12 02 00 2B 50  [1....+P
F0- 41 4C 41 54 49 4E 49 2E  ALATINI.
F8- 31 34 00 00 00 00 C8 4F  14....HO

TRACK $00  SECTOR $0B   DOS 3.3
```

To change all of the fonts simply repeat the steps - write the information to the disk before moving to another sector - the other fonts are found on the sectors BEFORE this one. Press the "Minus" key to move back one sector.

When you catalog your disk all the fonts that you have changed will read as $F7, rather than FON and are now able to be used with Publish It!

FONTASTIC NEWS

Wal Glynn

The Club recently purchased some 75 3.5in disks of Public Domain programs from the USA, for the 2GS Library. As these are sifted and checked they will become available for members.

Fifteen of these disks contain FONTS - that's a lot of fonts - in fact there are a total of 569 different typefaces on the disks. Some of these are single entries but many have different sizes, for example, there are 16 NESHOTA fonts ranging in size from 9 point to 42 point, and 14 DRAWING fonts ranging from 9 point to 80 point - I have counted the complete number of fonts and there are 1402 - give or take one or two.

Some of the fonts are probably less than useful while others are excellent. There are stylised fonts which lose their style in lower case - in many there are no lower case characters - "Dream.24" has no upper case, but when you type in lower case these letters are in upper case.

There appears to be some similarities among the fonts also - it is easy to imagine that someone with a font editor had added or subtracted a stroke from someone else's font and renamed it - you will have sort out the wheat from the chaff!

The great news about these fonts is that they are standard GS fonts and as such they're usable on the 2E for such programs as Timeout Superfonts and Publish It.

They are also usable on GS programs such as Appleworks GS, Multiscribe GS, and Paint programs like Paintworks Plus and GS Paint. This should create a whole new world for owners of these programs!

For those of you who only have 5.25in drives there is now a small selection of these fonts on two disks - AUG.92 and AUG.93, if there is a demand for more fonts on 5.25in disks please let me know which fonts you would like - check the information from the GS library.

For those owners of Publish It who want to use these fonts, you will have to change the filetype from FON to $F7. If you understand how to use a sector editor it is a simple matter to change the first hex byte after the name of the font from C8 to F7.

For those of you who are unsure about using a sector editor, I have detailed the procedure in a separate article.

By the way, Timeout Superfonts read the Publish It fonts without any change.

Good Luck!

NEW DISKS FOR THE 2E LIBRARY.

AUG Disk 89 - Aussie FrEd (V4.1) is a version of Al Roger's FrEdWriter, which has been improved with additional files, by Greg Butler. The program is particularly useful as an introductory Word Processor and has an "In-memory" tutor which can be accessed at any time.

The documentation for the program is contained in four files on the back of the disk.

AUG Disk 90 - FrEd Base (V1.2) is the result of a project sponsored by Apple Computer Australia and CUE Softswap and is another in the range of educational, public domain programs created by Greg Butler. The program (2 sides) is an excellent introduction to the use of database programs and includes a sophisticated graphing utility. It requires a 128K machine to operate.

AUG.91 - This is a double-sided demonstration disk of programs provided by BRODERBUND. On side 1 is a working copy of WHERE IN EUROPE IS CARMEN SANDIEGO, and on side 2 is a continuous slide show demonstration of the features of VCR COMPANION.

AUG.92 - This is the first of two double-sided disks of fonts for Timeout Superfonts and Publish It - the fonts are also usable with 2GS programs as well.

On this disk are PALATINI, ROSELLE, WINNETKA, BODONI, HOLLYWOOD.1-8, MANHATTAN, MARIE.OSMOND.12, MELROSE, MILANO, OLD.ENGLISH.18, OLD.WEST.36, and OTTAWA fonts and unless indicated are in a range of sizes.

AUG.93 - This is the second of two double-sided disks of fonts. The fonts on this disk are: DREAM.24, KAPPA.BOLD, MUNICH.36, DUNDEE, EVANSTON, BARRINGTON, BOSTON.48, GALENA, GLENCOE, ITASCA.

Unless indicated they are in arange of sizes.

The Hanging Apple Mystery

by Ken Ozanne

A couple of months ago, Ferg Brand approached me with the following problem:

If you BOOT your Apple, CALL -151 and then immediately issue the monitor command A000<1000.1FFFM (move the contents of memory locations 1000 to 1FFF to locations A000 to AFFF) then the Apple hangs and needs to be RESET before you can regain control. If you try the same monitor command after you have been working for a little while it works fine. (This statement was misleading, as will appear.)

This was intriguing and my first move was to check that the same symptoms did appear on my own Apple. (You may care to test the phenomenon before reading on.) Of course they did and it was up to me to track down the cause.

Actually it was clear that things had broken down at A5B2, but that didn't help much (it is the place in DOS where the current BASIC is established and, in hindsight, is reached purely because of the RESET and the remaining rump of DOS).

I guessed immediately that this was a Page Zero problem and began by dumping Page Zero of memory in Hex before and after the hanging. This showed around 25-30 bytes altered, of which my attention soon focused on bytes 36-39 (hex), which read BD 9E 81 9E originally and F0 FD 1B FD finally. (I did manage to get an intermediate state to confuse things, but I don't intend to discuss that.)

These bytes are output (36-37) and input (38-39) handler routine addresses and are the locations commonly known as the DOS "hooks".

It is obvious that the original move instruction wipes out much of DOS (DOS normally uses 9600 to BFFF and the move clobbered A000 to AFFF or almost half of DOS). Clearly then, a successful move wiped out the very routines that were supposed to handle screen I/O!

Small wonder then that the Apple hung.

The reason that RESET "fixed" things was that RESET, in a non-DOS environment (which we effectively had by chopping the heart out of it!), sets these locations to F0 FD 1B FD, which are the standard I/O handlers for an Apple without DOS.

In that environment there is nothing special about locations A000 to AFFF and we may overwrite them with impunity.

Of course the chances of any DOS command working at that stage must have been fairly minimal.

Moon walk

Bill Currie

As it is 20 years since Neil Armstrong walked on the moon, I thought I would write a program to portray that historic event. When you RUN this one-liner you will see Armstrong leaving the Luna Lander and going for his famous walk.

As the moon sets in the Pacific Ocean the scene ends, then starts over again, and again, and again.....

A 19 line expanded version is provided to play around with.

By the way, my wife has bought a one way ticket to the moon for me and my computer and says she will send up the return half when I arrive!!!

```
1  FOR A = Ø TO 3: POKE A,4 *
   NOT A: POKE 232 + A,Ø: NEXT
   : FOR A = Ø TO 9E9: HGR :
   FOR N = Ø TO 132: FOR U = Ø
   TO 1: SCALE= 4 - U: HCOLOR=
   U * 3: XDRAW 1 AT 1Ø6 + N,3Ø
   + N: HPLOT 1Ø5 + N,27 + N:
   HPLOT  RND (1) * 28Ø, RND
   (1) * 16Ø: HPLOT 1ØØ + N +
   U,N + U * 2: FOR L = 3Ø TO
   62: PRINT "^  ";: ROT= L - U
   * 8: DRAW 1: NEXT
   L,U,N,A,W,A,L,K
```

Courtesy of Ausom

```
1   FOR A = Ø TO 3
2   POKE A,4 *  NOT A
3   POKE 232 + A,Ø
4   NEXT
5   FOR A = Ø TO 9E9
6   HGR
7   FOR N = Ø TO 132
8   FOR U = Ø TO 1
9   SCALE= 4 - U
1Ø   HCOLOR= U * 3
11   XDRAW 1 AT 1Ø6 + N,3Ø + N
12   HPLOT 1Ø5 + N,27 + N
13   HPLOT  RND (1) * 28Ø, RND
    (1) * 16Ø
14   HPLOT 1ØØ + N + U,N + U * 2
15   FOR L = 3Ø TO 62
16   PRINT "^  ";
17   ROT= L - U * 8
18   DRAW 1
19   NEXT L,U,N,A,W,A,L,K
```

Glenn Richardson

For Your Eyes Only

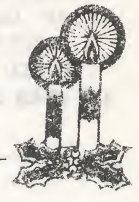
This program stores phone numbers on disk, in a code which I believe is UNBREAKABLE. Although a little slow, it is perfect to store name/address/phone numbers that only you need to know.

If any member can break the system, which I am sure cannot be done, I would be interested to hear from them.

Installation instructions are in the program.

```
Ø  GOTO 5: REM
1  REM   TO INSTALL YOUR PHONE DIRECTORY
2  REM   DELETE TEXT FILE NAMED SEC
3  REM   THEN TYPE: RUN 5ØØØ
4  REM  WARNING ALL STORED IMFO WILL BE LOST
5 CLEAR : SPEED= 255: DIM A$(255),K$(255),A
    (11),B$(24),W$(24):PRINT
1Ø  HOME : PRINT : HTAB 12: PRINT "PHONE /
    ADDRESS": VTAB 4: PRINT " NEW NAME  (1)":
    PRINT : PRINT " GET NAME  (2)": PRINT :
    PRINT " DEL NAME  (3)": PRINT : PRINT "
    NEW CODE  (4)": PRINT : PRINT "    > ";:
    GET U$
12  IF U$ = "1" OR U$ = "2" OR U$ = "3" THEN
    52Ø
15  IF U$ = "4" THEN 65ØØ
17  HTAB 6: PRINT "MAIN MENU": PRINT  CHR$
    (4);"RUNG.INDEX"
2Ø  IF  MID$ (B$(1),116,4) = M$ THEN 23
22  HOME : FOR T = 1 TO 1Ø: CALL  - 1Ø52: NEXT
    : VTAB 2: HTAB 3: SPEED= 2Ø: FLASH : PRINT
    "INCORRECT CODE": NORMAL : SPEED= 255: FOR
    T = 1 TO 4ØØØ: NEXT : PRINT  CHR$
    (4);"CLOSE": GOTO 5
23  HOME :X$ = "": VTAB 3: PRINT " NAME    >
    ";: INPUT NA$
24  IF  LEN (NA$) > 27 THEN  HOME : VTAB 3:
    PRINT " NAME'S TO LONG": GOSUB 6ØØØ: GOTO
    23
25  VTAB 5: PRINT " ADDRESS > ";: INPUT AD$
27  IF  LEN (AD$) > 37 THEN  FOR T = 1 TO 3:
    VTAB T + 4: CALL  - 868: NEXT : VTAB 5:
    PRINT " ADDRESS TO LONG": GOSUB 6ØØØ: VTAB
    5: CALL  - 868: GOTO 25
3Ø  VTAB 8: PRINT " P/CODE  > ";: INPUT PC$
32  IF  LEN (PC$) > 4 THEN  VTAB 8: PRINT "
    POST CODE INVALID": GOSUB 6ØØØ: VTAB 7:
    CALL  - 868: GOTO 3Ø
35  VTAB 11: PRINT " PHONE   > ";: INPUT PH$
37  IF  LEN (PH$) > 12 THEN  VTAB 11: CALL  -
    868: PRINT " NUMBER TO LONG": GOSUB 6ØØØ:
    VTAB 11: CALL  - 868: GOTO 35
4Ø  IF  LEN (NA$) < 4Ø THEN NA$ = NA$ + "#":
    GOTO 4Ø
41  IF  LEN (AD$) < 4Ø THEN AD$ = AD$ + "#":
    GOTO 41
42 PC$ = PC$ + "########" + PH$ + "########"
43  IF  LEN (PC$) < 35 THEN PC$ = PC$ + "#":
    GOTO 43
45 PC$ = PC$ + M$ + "##"
5Ø Z$ = NA$ + AD$ + PC$
9Ø  FOR T = 1 TO  LEN (Z$):A$(T) =  MID$
    (Z$,T,1): NEXT
11Ø  FOR T = 1 TO  LEN (Z$): IF A$(T) = " "
    THEN A$(T) = "#"
111  IF A$(T) = "*" THEN A$(T) = "#"
15Ø X$ = X$ + A$(T): NEXT
16Ø F = F + 1:B$(F) = X$
21Ø  SPEED= 255: PRINT : PRINT  CHR$
    (4);"CLOSE": PRINT CHR$ (4);"OPEN SEC":
    PRINT  CHR$ (4);"WRITE SEC": HOME
23Ø Z$ =
    "ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567890----#
    ####"
27Ø  FOR T = 1 TO START
29Ø  PRINT  MID$ (Z$, INT ( RND (1) * 45) +
    1,1): NEXT : GOTO 315
31Ø  PRINT  MID$ (Z$, INT ( RND (1) * 45) +
    1,1): RETURN
315 U = 1:Q = 1:X$ = B$(U): GOSUB 322: GOTO 33Ø
32Ø U = U + 1:Q = 1: IF U > F THEN 465
321 X$ = B$(U)
322  IF U$ = "3" THEN X$ = K$(U)
325  IF U$ = "3" AND K$(U) = "" THEN 32Ø
327  RETURN
33Ø  FOR T = 1 TO 11
37Ø  FOR B = 1 TO A(T)
39Ø  GOSUB 31Ø: NEXT
41Ø  PRINT  MID$ (X$,Q,1):Q = Q + 1: IF Q > 119
    THEN  GOSUB 32Ø
43Ø  NEXT T
45Ø  GOTO 33Ø
465  FOR T = 1 TO START: GOSUB 31Ø: NEXT :
    PRINT "*"
47Ø PRINT "END": PRINT  CHR$ (4);"CLOSE"
```

```
49Ø  GOTO 5
52Ø  HOME : FOR T = 1 TO 11: VTAB 2: HTAB 14 +
     T: PRINT "_": NEXT : FOR T = 1 TO 4: VTAB
     4: HTAB 14 + T: PRINT "_": NEXT
525 P = Ø:M$ = "": VTAB 2: PRINT " ENTER CODE >
     ": FOR T = 1 TO 11: VTAB 2: HTAB 14 + T:
     GET A(T): NEXT : HTAB 1: VTAB 4: PRINT "
     ENTER WORD > ": FOR T = 1 TO 4: VTAB 4:
     HTAB 14 + T: GET N$:M$ = M$ + N$: NEXT :
     HOME
53Ø : PRINT : PRINT "  DECODING": PRINT
54Ø  PRINT  CHR$ (4);"OPEN SEC": PRINT  CHR$
     (4);"READSEC"
56Ø START = A(1) * A(5) * A(9): FOR W = 1 TO
     START: INPUT X$: NEXT
58Ø  FOR T = 1 TO 11
6ØØ  FOR X = 1 TO A(T)
62Ø  INPUT X$: GOSUB 55ØØ
625  IF X$ = "*" THEN 58Ø
63Ø  IF X$ = "END" THEN 82Ø
635  IF  LEN (A$) > 118 THEN 81Ø
64Ø  NEXT X
68Ø  INPUT X$: IF U$ = "1" THEN 685
681 W$ = W$ + X$
682  IF X$ = "#" THEN A$ = A$ + " ": GOTO 74Ø
685  IF X$ = "*" THEN 58Ø
69Ø  IF X$ = "END" THEN 82Ø
7ØØ A$ = A$ + X$
74Ø  NEXT T: GOTO 58Ø
81Ø F = F + 1:B$(F) = A$:K$(F) = W$:A$ = "":W$
     = ""
812  IF  MID$ (B$(F),116,4) = M$ THEN 64Ø
813  GOTO 22
82Ø  IF U$ = "1" THEN  PRINT  CHR$ (4);"CLOSE":
     GOTO 2Ø
825  IF U$ = "3" THEN 1ØØØ
827  IF U$ = "4" THEN  PRINT  CHR$ (4);"CLOSE":
     GOTO 652Ø
83Ø  PRINT CHR$ (4);"CLOSE": SPEED= 19Ø: HOME
     : HTAB 12: PRINT "PHONE / ADDRESS": PRINT
     : FOR T = 1 TO F
835 S = S + 1: IF S > 5 THEN S = Ø: PRINT "  >
     MORE <": CALL  - 998: HTAB 5: CALL  - 756:
     HOME
84Ø  PRINT  LEFT$ (B$(T),115): PRINT : NEXT
9ØØ  PRINT " END OF FILE'S": CALL  - 998: HTAB
     2: CALL  - 756: GOTO 5
1ØØØ  HTAB 12: PRINT "DELETE FILE'S": PRINT
1Ø1Ø  PRINT  CHR$ (4);"CLOSE": SPEED= 19Ø: HOME
     : HTAB 12: PRINT "DELETE FILE": PRINT :
     FOR T = 1 TO F
1Ø2Ø S = S + 1: IF S > 5 THEN S = Ø: PRINT "  >
     MORE <": CALL  - 998: HTAB 5: CALL  - 756:
     HOME
1Ø3Ø  PRINT  LEFT$ (B$(T),115): PRINT : NEXT
1Ø4Ø  PRINT : PRINT " ENTER NAME OF FILE > ";:
     INPUT M$: HOME
1Ø5Ø  FOR T = 1 TO F: IF  LEFT$ (B$(T), LEN
     (M$)) = M$ THEN  PRINT  LEFT$ (B$(T),115):
     GOTO 1Ø6Ø
1Ø55  NEXT : PRINT " NAME NOT MATCHED": CALL  -
     1Ø59: CALL  - 998: HTAB 1: CALL  - 756:
     GOTO 5
1Ø6Ø  PRINT : PRINT " DELETE THIS FILE  Y/N ";:
     GET A$: IF A$ = "Y" THEN 11ØØ
1Ø8Ø  HOME : GOTO 1Ø55
11ØØ  PRINT : PRINT " ARE YOU SURE >    Y/N";:
     GET A$: IF A$ = "Y" THEN 112Ø
111Ø  GOTO 5
112Ø B$(T) = "":K$(T) = "": GOTO 21Ø
5ØØØ  SPEED= 9Ø: HOME : PRINT : PRINT "
     READ THIS CAREFULLY....": PRINT : PRINT
5ØØ2  PRINT " YOU WILL NEED TO ENTER A"
5ØØ4  PRINT "  (11) DIGET CODE": PRINT
5ØØ6  PRINT " TELEPHONE NUM + AGE etc": PRINT "
      what ever you wish"
5ØØ8  PRINT : PRINT " THEN YOU MUST ENTER A"
5Ø1Ø  PRINT "  4 LETTER WORD": PRINT
5Ø12  PRINT " WRITE IT DOWN AND HIDE IT": PRINT

5Ø14  PRINT "  IF YOU FORGET, THAT CODE": PRINT
      " THEN YOU WILL NEVER SEE YOUR": PRINT "
      PHONE NUMBERS AGAIN": PRINT
5Ø15  PRINT " THIS HAS TO BE DONE TO SET UP":
     PRINT "   YOUR CODE SYSTEM": PRINT
5Ø16  PRINT : PRINT "ANY KEY TO PROCCED": CALL
     - 998: CALL  - 756: SPEED= 255
5Ø18  CLEAR : SPEED= 255: DIM A$(255),K$
     (255),A(11),B$(24),W$(24):PRINT
5Ø2Ø  HOME :P = Ø:M$ = "": VTAB 2: PRINT "
     ENTER CODE > ": FOR T = 1 TO 11: VTAB 2:
     HTAB 14 + T: GET A(T): NEXT : HTAB 1: VTAB
     4: PRINT " ENTER WORD > ": FOR T = 1 TO 4:
     VTAB 4: HTAB 14 + T: GET N$:M$ = M$ + N$:
     NEXT : HOME
5Ø25 START = A(1) * A(5) * A(9): GOTO 23
55ØØ NN = NN + 1: IF NN = 1 THEN  VTAB 1: HTAB
     5: PRINT "////": VTAB 3: HTAB 5: PRINT
     "----": RETURN
55Ø5  IF NN = 2 THEN  VTAB 1: HTAB 5: PRINT
     "----": VTAB 3: HTAB 5: PRINT "\\\\":
     RETURN
551Ø  IF NN = 3 THEN  VTAB 1: HTAB 5: PRINT
     "\\\\": VTAB 3: HTAB 5: PRINT "////":NN =
     Ø: RETURN
6ØØØ  PRINT  CHR$ (7): FOR T = 1 TO 22ØØ: NEXT
     : RETURN
65ØØ  HOME :P = Ø:M$ = "": VTAB 2: PRINT "
     ENTER ORIGINAL CODE > ": FOR T = 1 TO 11:
     VTAB 2: HTAB 23 + T: GET A(T): PRINT A(T):
     NEXT
65Ø5  HTAB 1: VTAB 4: PRINT " ENTER ORIGINAL
     WORD > ": FOR T = 1 TO 4: VTAB 4: HTAB 23
     + T: GET N$: PRINT N$:M$ = M$ + N$: NEXT
651Ø  HOME : GOTO 53Ø
652Ø  HOME :P = Ø:M$ = "": VTAB 2: PRINT "
     ENTER NEW CODE > ": FOR T = 1 TO 11: VTAB
     2: HTAB 18 + T: GET A(T): PRINT A(T): NEXT

6525  HTAB 1: VTAB 4: PRINT " ENTER NEW WORD >
     ": FOR T = 1 TO 4: VTAB 4: HTAB 18 + T:
     GET N$: PRINT N$:M$ = M$ + N$: NEXT
6527  PRINT : PRINT " HAPPY WITH THIS CODE >
     Y/N ";: GET T$: IF T$ = "Y" THEN 653Ø
6528  GOTO 5
653Ø START = A(1) * A(5) * A(9):U$ = "3": FOR T
     = 1 TO F:N$ =  LEFT$ (K$(T),115):N$ = N$ +
     M$:K$(T) = N$: NEXT : GOTO 21Ø
```



DOS CALLS AND POKES

by Grant Kwai

Below I have listed a few Call and Pokes that might come in handy from time to time. They all work on my //e and they should work on the other Apple computers as well. A few of these are very handy like how to protect your secret program from prying eyes and how to enter Applesofts built-in mini-assembler.

Call -151 : Enters machine code
Call -800 : Enters mini-assembler
Call -803 : Enters mini-assembler with beep!
Call -678 : Waits for a 'return' key press
Call 976 : re-instates Dos Vector
Call -936 : Clears screen
Call -1370 : Reboots disk

Poke -21503,0 :prevents Dos catalog
Poke -21503,17:Fixes Dos catalog
POKE 49234,0 :Graphics on bottom 4 lines in HGR
Poke 2049,1 :Only list first line of program
*6<conrtol-P) :Reboots disk from machine code

OPCODES

By Grant Kwai

Below I have listed all the opcodes for the 6502 and 65C02. This should help when trying to program with the mini-assembler and also learning about machine code and how it works.The first set work for both 6502 Apple machines and the second batch only work on Apples' with the 65C02 processors(//c and enhanced //e)

OPCODES

ADC ADd Memory to Carry a A-reg
AND Logical AND memory to A-reg
ASL Arithmatic Shift bits Left
BCC Branch if Carry Clear
BCS Branch if Carry Set
BEQ Branch if EQual Zero
BIT Test A-reg Bit with memory
BMI Branch If Minus
BNE Branch if Not Equal to zero
BPL Branch if PLus
BRK Software interrupt-BREAK
BVC Branch if oVerflow Clear
BVS Branch if oVerflow Set
CLC Clear Carry fLag
CLD Clear Decimal fLag
CLV Clear oVerflow fLag
CMP CoMPare Memory and A-reg
CPX ComPare Memory and X-reg
CPY ComPare Memory and Y-reg
DEC Decrement X-reg by 1
DEY Decrement Y-reg by 1
EOR Exclusive OR memory and A-reg
INC INCcrement memory by 1
INX INcrement X-reg by 1
INY INcrement Y-reg by 1
JMP JuMP to new address
JSR Jump but Save Return address
LDA LoaD A-reg from memory
LDX LoaD X-reg from memory
LDY LoaD Y-reg from memory
LSR Logical Shift bits Right
NOP No OPeration
ORA Logical OR memory A-reg
PHA PusH A-reg on stack
PHP PusH P-reg on stack
PLA PulL A-reg from stack
PLP PulL P-reg from stack
ROL ROtate bits Left
ROR ROtate bits Right
RTI ReTurn from Interrupt
RTS ReTurn from Subroutine
SBC SuBtract memory from A-reg
SEC SEt Carry flag
SED SEt Decimal flag
SEI SET Interrupt flag
STA STore A-reg into memory
STX STore X-reg into memory
STY STore Y-reg inot memory
TAX Transfer A-reg into X-reg
TAY Transfer A-reg into Y-reg
TSX Transfer S-reg into X-reg
TXA Transfer X-reg into A-reg
TXS Transfer X-reg into S-reg
TYA Transfer Y-reg into A-reg

On 65C02 ONLY

BRA BRanch Always
PHX PusH X-reg onto stack
PHY PusH Y-reg onto stack
PLX PulL X-reg from stack
PLY PulL Y-reg from stack
STZ STore Zero
TRB Test and Reset Bits
TSB Test and Set Bits

A Little Wallpaper for the Apple III

By David Ottalini, Apple /// SIG Co-Chairman

To get your programming juices in swing for the new year, here's a Business Basic program by Pair Software's Frank Moore that will produce excellent Mandelbrot graphs. You will need the Bgraf.Inv invokable module for it to work (it's on some of our PD offerings if you don't already have it). You GS Basic users may also enjoy adapting this for use on the GS.

```
10   REM PROGRAM **    WALLPAPER      **
20   ON ERR GOSUB 1000:END
30   INVOKE"bgraf.inv"
40   GOSUB 500
45   HOME:PRINT CHR$(4);
50   PRINT"This program is an adaption of A.K. Dewd-
     ney's article on"
51   PRINT"'Wallpaper for the Mind' in the Computer
     Recreations section"
52   PRINT"of the September 1986 issue of Scientific
     American."
60   PRINT
61   PRINT"If you love Mandelbrot graphs, you'll love
     these graphs."
62   PRINT"        Use CONTROL-C RETURN to end the
     program."
70   PRINT
80   PRINT"We suggest you start with values of"
80   PRINT"15, 20 and 87 for Corner A, Corner B and
     Side."
86   PRINT
90   PRINT"Frank W. Moore, 74666,3660";CHR$(15)
100  VPOS=14:INPUT"Input Corner A: ";corna$
105  IF corna$="" THEN PRINT CHR$(7);:GOTO 100
110  corna=VAL(corna$)*-1
112  IF corna>1 OR corna<-100 THEN PRINT
     CHR$(7);:GOTO 100
115  VPOS=15:INPUT"Input Corner B: ";cornb$
120  IF cornb$="" THEN PRINT CHR$(7);:GOTO 120
125  cornb=VAL(cornb$)*-1
130  IF cornb>1 OR cornb<-100 THEN PRINT
     CHR$(7);:GOTO 120
140  VPOS=16:INPUT"Input Side: ";side$
142  IF side$="" THEN PRINT CHR$(7);:GOTO 140
145  side=VAL(side$)
150  VPOS=17:INPUT"input graphic Mode (0,1,2 or 3):
     ";mode$
151  IF mode$="" THEN PRINT CHR$(7);:GOTO 150
153  mode%=VAL(mode$)
155  IF mode%<0 OR mode%>3 THEN PRINT CHR$(7);:GOTO
     150
160  IF mode%<>1 THEN 180
170  VPOS=18:INPUT"Pen Color: ";pen$
171  IF pen$="" THEN PRINT CHR$(7);:GOTO 170
172  pen%=VAL(pen$):IF pen%<0 OR pen%>15 THEN PRINT
     CHR$(7);:GOTO 170
175  VPOS=19:INPUT"Fill Color: ";fill$
176  IF fill$="" THEN PRINT CHR$(7);:GOTO 175
177  fill%=VAL(fill$):IF fill%<0 OR fill%>15 THEN
     PRINT CHR$(7);:GOTO 175
178  IF fill%=pen% THEN PRINT CHR$(7);:GOTO 175
180  IF mode%=0 THEN pen%=15:fill%=0:ver%=279
185  IF mode%=1 THEN ver%=279
190  IF mode%=2 THEN pen%=15:fill%=0:ver%=559
200  IF mode%=3 THEN fill%=0:ver%=139
210  VPOS=21:HPOS=1:PRINT"Do design in the
     ";modes$(mode%);
215  PRINT" x 192 grafix mode with pen and fill
     colors"
220  IF mode%=3 THEN PRINT"of various pen colors and
     black.":GOTO 240
230  PRINT"of ";pens$(pen%);" and ";fill$(fill%);"."
240  PRINT:PRINT"Press RETURN to begin, ESCAPE to
     start again...";
250  GET char$
252  IF char$=CHR$(27) THEN 45
255  IF char$<>CHR$(13) THEN 250
257  IF mode%<>3 THEN GOSUB 400
259  REM       **** SET UP GRAPHICS MODE AND SCREEN
     ****
260  PERFORM grafixmode(%mode%,%1)
270  PERFORM grafixon
280  PERFORM fillcolor(%fill%)
290  PERFORM fillport
294  REM **** ON KEYPRESS RETURN TO MAIN MENU ****
295  ON KBD POP:GOSUB 1000:GOTO 50
298  REM **** FIND AND PRINT SCREEN PIXELS ****
299  REM **** THIS IS MAIN PART OF PROGRAM ****
300  FOR x%=zero% TO ver%:REM **** SET PIXEL COLUMN
     ****
310  FOR y%=zero% TO hor%:REM **** SET PIXEL ROW ****
320  i=corna+(side*x%/ver%)
330  j=cornb+(side*y%/hor%)
340  z=(i*i)+(j*j)
350  c%=INT(z)
359  REM **** IF MODE 3 THEN CALCULATE PEN COLOR AND
     SET ****
360  IF mode%=3 THEN pen%=(c%-(INT(c%/16)*16)):GOSUB
     00:GOTO 380
368  REM **** OTHER MODES PRINT DOT IN CURRENT PEN
     COLOR ****
369  REM **** IF c% IS AN EVEN NUMBER ****
370  IF c%/two%<>INT(c%/two%) THEN 390
379  REM **** PRINT SCREEN DOT IN CURRENT PEN COLOR
     ****
380  PERFORM dotat(%x%,%y%)
390  NEXT
395  NEXT
396  REM **** IF GRAPH COMPLETE, SAVE AND RETURN TO
     MAIN MENU ****
397  PERFORM gsave."w.graph":GOSUB 1000:GOTO 45
399  REM **** SET PEN COLOR ****
400  PERFORM pencolor(%pen%)
410  RETURN
499  REM **** INITIALIZE VARIABLES ****
500  hor%=191:zero%=0:two%=2:DIM
     modes$(3),pens$(15),fill$(15)
510  modes$(0)="280":modes$(1)="280":modes$(2)=
     "560":modes$(3)="1 40"
520  pens$(0)="Black":fill$(0)="Black"
530  pens$(1)="Magenta":fill$(1)="Magenta"
540  pens$(2)="Dark Blue":fill$(2)="Dark Blue"
550  pens$(3)="Purple":fill$(3)="Purple"
560  pens$(4)="Dark Green":fill$(4)="Dark Green"
570  pens$(5)="Gray 1":fill$(5)="Gray 1"
580  pens$(6)="Medium Blue":fill$(6)="Medium Blue"
590  pens$(7)="Light Blue":fill$(7)="Light Blue"
600  pens$(8)="Brown":fill$(8)="Brown"
610  pens$(9)="Orange":fill$(9)="Orange"
620  pens$(10)="Grey 2":fill$(10)="Grey 2"
630  pens$(11)="Pink":fill$(11)="Pink"
640  pens$(12)="Green":fill$(12)="Green"
650  pens$(13)="Yellow":fill$(13)="Yellow"
660  pens$(14)="Aqua":fill$(14)="Aqua"
670  pens$(15)="White":fill$(15)="White"
700  RETURN
999  REM **** HOME, RETURN TO TEXT SCREEN AND RELEASE
     GRAPHICS MEMORY ****
1000 OFF KBD:HOME:TEXT:PERFORM release:PERFORM
     release:PERFORM release
1010 RETURN
```

Bill Currie

— AUSOM News

Apple // — Stamps

When I heard that Australia Post was putting the price of stamps up again, I decided to print my own.

The one line program 'STAMPS' will do all the work for you.

The program will design and display 40 stamps on the screen, then give a beep. If you have your printer connected just hit any key for a print-out.

Unless you have a colour printer you will need to slap a bit of Texta-colour on the stamps to make 'em look dinkum.

The 'GRIDS' at the end of the program stands for Graphics, Rotated, Inverted, Double size, Secondary page. This suits my BMC-80/MicroBuffer but may need changing for your set-up.

The scenes on the stamps are the piles of gold that Australia Post will make from the price increase.

You can change these scenes by changing:

:POKE228,RND(1)*256: to

:POKE228,PEEK(S*X+Y): or

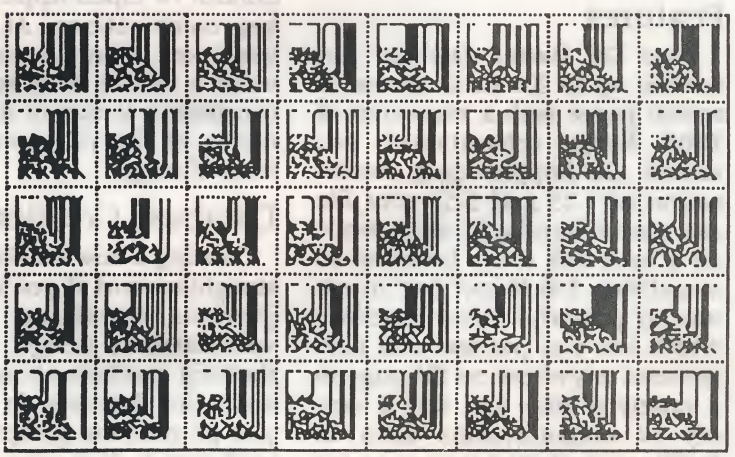
:POKE228,PEEK(492ØØ):

which prints some corners of picture frames and gives a 'raspberry' to A.P.O. at the same time.

An 'easier to follow' expanded version of STAMPS is provided for beginners or people without a Line Editor. Actually I don't need the stamps now, as the man from the A.P.O. told the warders in here not to let me write any more letters! For a view from my cell try :POKE228,99: in the program.

```
1   FOR A = Ø TO 6: READ B:
    POKE A,B: POKE 232 + A,Ø:
    NEXT  :  DATA  1,,4,,53
    ,39,:Z = 35: HGR2 : ROT=
    Ø: FOR Y = Ø TO 4: FOR X =
    Ø TO 7: FOR S =  1 TO Z:
    POKE 228, RND (1) * 256:
    SCALE= S: XDRAW 1 AT X *
    Z,Y * Z: SCALE=  1Ø + S /
    2: DRAW 1 AT X * Z + 4,Y *
    Z + 4: NEXT S,X,Y: PRINT
    CHR$ ( 7): GET A$: PRINT :
    PRINT   CHR$  (4)"PR#1":
    PRINT  CHR$ (9)"GRIDS"
```

```
1  FOR A = Ø TO 6
2  READ B
3  POKE A,B
4  POKE 232 + A,Ø
5  NEXT
6  DATA 1,,4,,53,39,
7 Z = 35
8  HGR2
9  ROT= Ø
1Ø  FOR Y = Ø TO 4
11  FOR X = Ø TO 7
12  FOR S = 1 TO Z
13  POKE 228, RND (1) * 256
14  SCALE= S
15  XDRAW 1 AT X * Z,Y * Z
16  SCALE= 1Ø + S / 2
17  DRAW 1 AT X * Z + 4,Y * Z
    + 4
18  NEXT S,X,Y
19  PRINT  CHR$ (7)
2Ø  GET A$
21  PRINT
22  PRINT  CHR$ (4)"PR#1"
23  PRINT  CHR$ (9)"GRIDS"
```



Review of DB Master Professional for the Apple II

by Ian Wright

article courtesy of AUSOM

I am one of those people who use an Apple II (mine's a IIe) for serious business at work and am always on the lookout for truly professional software to extend the capabilities of my computer. I believe the Apple II is today a much under-rated computer, left behind in the flurry for greater features and performance. If you point out to people that most of the power and potential of their superior computers will never be used to get the job done any more efficiently, you are regarded as a befuddled twit. Now I can't argue the point about being a befuddled twit, the evidence against me is too damning, but I can demonstrate capabilities on my Apple IIe which match and in many cases better those of the more powerful machines around.

DB Master Professional, a full featured database for the enhanced Apple IIe, IIc or IIgs, gives us one more tool with which to dazzle those who feel that our machines are not up to serious work. This review concerns itself with DB Master Professional, the most powerful version currently available. Also available is DB Master Version 5.0 with less features (and lower price) as well as special educational versions and network versions.

Features

Your DB Master database can contain up to 200 fields across 30 screen pages with a maximum of 2000 bytes (characters) per record. On floppies (any combination of 5.25 and 3.5) your file can spread across 50 disks while on a hard disk it can be up to 10 megabytes. DB Master has an extremely powerful report generator which lets you put text and field contents anywhere on the page in a variety of sizes and with a variety of enhancements such as bolding, underlining, centreing etc. DB Master Professional also has 'relational' capabilities. In brief, these let you relate data in one database to up to 10 other databases. For example, posting data in one database can automatically send data to another, entering an item code in one database can cause the program to 'look up' a value in another. These are just some of the more impressive features, others will be mentioned below.

Appearance

The first thing you notice when you fire up DB Master is the text based Main Menu. None of those fancy but processor intensive graphics displays here—this package is on about performance, not pretties. Notwithstanding this, the menu is clear and well designed and the 22 menu options are grouped in four sections. These are Data Entry and Search, Reports and Data Exchange, Maintenance Functions, and Change Files or Exit.

Main Menu choices are made by typing the Item number and pressing Return. Once an option has been chosen, a two or three bar menu appears across the bottom of the screen while the rest of the screen is dedicated to the function chosen. Options at this point are usually selected by Control or Open-Apple and letter key combinations. At times the letter key alone is sufficient to make a choice. This apparent inconsistency is one of my few criticisms of the program as it can be confusing.

Database Creation

Creating a new database is quite straightforward if you've had any previous experience. As always with database design, time spent thinking carefully about what you want the database to do before you go near the computer is time well spent. If you've only used AppleWorks you may find the additional complexity a bit daunting at first.

After setting the location where the file will be created you are presented with the field definition screen. For each field (category) in the new database you need to define the field type (from a choice of 13 types), name it, set its display form (normal, inverse, non-display) and enter the field length.

Field types include Alphanumeric (up to 250 characters), Numeric (3 types), Dollars/Cents, Yes/No (Y/N), User Defined fields and Label only fields. Computed fields are possible which are the results of mathematical operations performed on earlier fields. Automatically posted fields for Record Creation date and time, Last Edit date and time are also possible. Dates can be in one of 11 possible formats. And on it goes. It should be obvious that the range of field types are extensive!

Once the fields have been defined and you leave the field creation function you have the option to enter the formulae for any computed fields. The program then prompts for the Index fields. Following this, the new file is created.

Data Entry

'Add Records' is Option 1 on the Main Menu. Choosing this takes you into the currently open database or if you haven't opened a file to the Open file screen. Once into data entry mode, you are presented with the Find Record screen. Typing Control-F (or Open-Apple-F) at this point takes you to a blank record ready for your data. Screens can be customised to display only those fields which actually need data entered. This makes for less confusing data en-

try and in some cases for confidentiality.

Option 2 is 'Display, Edit and Delete Records'. This gives you just what it says. You can edit any entries, look at particular records or delete records. When editing existing records you have the option of saving them as new records or saving them over the existing record.

Browsing

It is possible to create 'Browse' formats which are selected fields from the full database. These can send all or selected records to screen or printer. Sideways scrolling on the screen is supported if the fields selected are wider than 80 columns. Up to 255 Browse formats are supported for each file. The search criteria are entered after the Browse format is loaded.

Searching for Records

The search feature uses a number of search 'operators' such as '<', '>', '=', begins with, includes, does not include, and so on (17 in all). Once you have nominated the operator, you enter the text or value relevant to the operator. For example, you might enter '<' for 'less than', then the value 100. This would return all records with a value of less than 100 in that particular field. It is possible to save Search formats with the file and to reload them each time you want to search. This is extremely useful, as it is possible to develop very complex search criteria. Presaved search criteria can be used to print selected records as well as in the 'Display, Edit and Delete Records' Main menu option.

Report Creation and Printing

This aspect of DB Master is one of its most impressive features and one which makes it a better prospect than most databases available for other computers. It's not much good having the data in your database if you can't get it out in the form you want. This applies to design as well as selection of records. In Report Layout formats DB Master supports mixed text and field data anywhere on the page, mixed text sizes (depending on your printer), underlining, bolding, italics, left, right and centre justification, headers and footers, current date and time etc. etc. Word wrap is also available in the Professional version. What's more, it doesn't take a programmer to get these features working. A clear screen display helps you 'paint' the page layout. The page can be anything from 20 to 250 characters wide and 1 to 99 lines long. Up to 255 formats per file are possible. Conditional printing using 'IF-THEN-ELSE' logic is also possible, enabling you to print certain parts of the database if certain other field criteria are met.

In order to print a report, a Master Report Format must be created. To create this, a selection is made of a Layout Format, a Sort Format, a Select Format and Printer Format. For example you could have the same Layout, Sort and Printer formats combined with a different Select format, to print lists of all records entered before a nominated date and all entered after another date. These formats can all be saved with the file, thus making repetitive tasks a matter of defining a format once and using it whenever needed. This probably sounds confusing—just accept my word that it is extremely powerful and useful once you get the hang of it.

Common printer types are supported with drivers for Epson, ImageWriter etc. A Printer Driver Editor Utility is available at extra cost from Stone Edge to create drivers to your own requirements.

System Requirements

To run DB Master you need an enhanced IIe with 128K, a IIc or a IIgs with at least two 5.25" drives or any combination of 5.25" and 3.5" drives. The program is not copy protected and works with hard or RAM disks (300K required). Because the database file is disk based you do not need extended memory. Extended memory is only useable as a RAM disk which speeds operation considerably. The program supports the creation of an Applied Engineering RAM disk through an option which runs the ProDrive program at startup. The program is supplied on two 5.25" and one 3.5" disks. Two spiral bound manuals, "Glossary" and "Tutorial & Reference" are supplied with the program, totalling about 700 pages of well written documentation. A comprehensive tutorial is part of the documentation with sample files on disk.

Comments

I have only touched on some of the more obvious features of DB Master in this review. I haven't mentioned features like the Global Editor to change values across a total database, the variety of defaults which can be set, full or partial restructure of the database, the merging of different databases, password protection at various levels, search abilities to nine levels, extensive import and export capabilities, and lots more. DB Master is a very powerful package indeed and one which continues to reward the intrepid user with feature after feature.

It is not as fast, accessible or easy to use as the AppleWorks database but is dramatically more powerful. Be prepared to spend a lot of time becoming familiar with the program because it is complex. You don't need DB Master for a simple mailing list (that would be overkill) but for any database jobs which require real power over data entry and manipulation and maximum control over the printed output there is nothing like it in the Apple II world. Having dabbled with a number of databases in the IBM world I don't think that there is much in that world either as good as DB Master for people who want power features and user control without having to resort to programming.

Availability

Unfortunately the program is not available in Australia. I imported my copy from Stone Edge Technologies, P.O. Box 3200, Maple Glen, PA19002, U.S.A. It cost $US295 plus $US45 shipping. That came to around $430 Australian at the time. I have since seen it advertised by Programs Plus (see a recent Incider or A+) for $US195 plus $US35 shipping—a big saving. A2 Central also has it for $US245 including surface shipping.

Q and A

by Ken Ozanne

(This article was on a disk I inherited from Hans-I hope the information is still relevant!) Ed.

What are text files?

Text files are files stored in ASCII character code, rather than the various other forms available on the Apple (Integer, Applesoft or Binary). This is really simpler, though it may not at first seem to be. There are two kinds, Random access and Sequential text files (see the DOS Manual chapters 6 to 8 for more information). Sequential text files are the easier ones to use for beginners, so I will discuss them only from now on.

What are they used for?

Textfiles are used for all kinds of things - for example, most word processors, including the one with whose aid Applecations is written, store text as sequential textfiles. It would be usual to store information for a data base system on random access textfiles. If I want the computer to run a whole bunch of programs one after the other I can set up a sequential textfile to supervise it all and go fishing for the afternoon. These are just examples - use of textfiles is an integral part of using your Apple.

How are they created?

Here is a little program that will write a textfile containing the program itself: 10 D$=CHR$(4) 20 PRINT D$"OPEN TEXT CAPTURED" 30 PRINT D$"WRITE TEXT CAPTURED" 40 LIST 10,90 50 PRINT D$"CLOSE TEXT CAPTURED" 90 END The D$, OPEN, WRITE and CLOSE keywords are the vital bits. D$ is used to indicate that a DOS command is coming up within a program. OPEN opens a file. WRITE prepares it for writing. CLOSE ends off and returns output to the screen. (Output goes to the file between WRITE and CLOSE.)

How are they accessed?

You OPEN the file as above and READ it instead of WRITEing to it. Don't forget to CLOSE it afterwards or the computer won't respond to the keyboard! There is a good textfile reader on A.U.G. DISK 14 (it reads lower case sensibly even if you lack a lower case chip). This is a good program to study for advanced Apple programming techniques, but don't expect to understand it all the first time through!

What is happening?

I ran the following program: 10 T = 0 20 T = T + 0.2 30 PRINT T 40 IF T<12 THEN 20 50 END all went well until 6.2 but then it printed 6.39999999 and produced strange results up to 9.99999998.

A. This is a standard problem with all binary computers. The numbers are stored internally in binary form and .2 cannot be expressed exactly in binary form. Eventually the small error shows up in your printout. There are ways around such problems, though they are not negligible and may become very important in large scientific problems. You may find it enough to write: 25 T=INT(10*T+0.5) 26 T=T/10 these two lines will round off T to one decimal place and keep the unwanted .9999999s out of sight. You can replace the 10 with 100 or 1000 for two or three decimals and so on up to about eight decimals (perhaps fewer) when you start running out of accuracy. (That too can be fixed but not so simply.)

For more advanced users - the 6502 chip in the Apple has a BCD mode (it doesn't have to be binary) and exact decimal arithmetic is possible. But you must be able to program in machine/assembler code to take advantage of this.

FROM VARIOUS OVERSEAS MAGAZINES

Q Why is it that in some programs PR#1 is used to call the printer, yet in others CTRL-D, or CHR$(4) is needed.

PR#1 is a BASIC as well as DOS command. In a non-disk environment the command PR#1 would work perfectly well. However if you are usi
ng a disk the DOS command is needed. This is done by the statement;

PRINT CHR$(4);PR#1,
where CHR$(4) is CTRL-D.

All standard Apple input and output passes through two 'hooks' in the Monitor ROM firmware. These are two memory addresses in read/w
rite memory (one for input, one for output) that tell the Apple where to go to output or input a character. Without
DOS these addresses point to a keyboard reading routine and video screen printing routine in the Monitor ROM. When DOS is present it
modifies the 'hooks' to point to routines inside DOS.
Thus when you are printing stuff from a program, DOS looks at all the output and if it sees a carriage return followed by a CTRL-D
it tries to interpret the following characters as a DOS command.

Executing a PR#1 from within a program directs all the output directly to slot #1 and bypasses DOS so that any DOS commands that fol

low will be ignored. However CHR$(4);"PR#1" signals DOS to pass the output character along to slot #1 instead of the
video output after it is finished with it.

Fortunately DOS is fairly tenacious, and if disconnected by PR#1 will reconnect itself the next time it gains control when any input is requested by the program. However if you disconnect both the input and output, DOS is 'lost' and to reconnect it you must execute a CALL 976 from Basic or 3D0G from the Monitor.

Q If a BASIC program contains machine code with it (via pokes, embedded code, LAM routine or what have you), I frequently wish to save the machine language separately. How do I do it?

A First, let me apologize for whatever degree of garbling there is in the question - it was sent to Hans and transmitted by phone. There are a large number of ways of attaching machine code to an Applesoft program - I recall an article on this in a recent CALL A .P.P.L.E. which listed a dozen or so techniques. So my answer will have to be general.

You will have to do some detective work. In a LAM routine, you will have something like:

110 T$ = "A884: 4C 54 58"

Here the A884 is the address where the hex is to be loaded by the monitor and you could

BSAVE NAME,A$A884,L$3

Actually, the more you know the more problems you can see and this particular tidbit resides right inside DOS. In fact it represent s a deliberate alteration to DOS and the article documents what is going on quite well. But it is still advisable tobe suspicious and to keep a memory map.

I chose that example to be short - the same article has longer LAM routines to which the same points apply.

Other embedded machine language works similarly (I don't propose to multiply examples here). The only extra problem is if the machine code is POKEd either directly or via DATA statements. In that case you will need to translate the first address POKEd to into hex and also the length of the section POKEd. (Yes, I know you can do it in decimal, but I don't know anyone who can e ffectively think of the Apple memory space in decimal. And you do want to know what you have done when you finish.)
Once you have the address and length you can BSAVE those locations to a file as before.

Q. I would like to write an Applesoft line of the form:

100 GO TO A
where A has a value determined by some previous calculation.

A. To start with, something like this is easy in Integer BASIC and possibly you can simply go to Integer and do what you want there.

If not, the problem arises because Applesoft stores the ASCII "name" of the number and not its value. Thus the GO TO "sees" a name and not a number. (I go into this in some more detail in my DOS notes, but I don't know of another source for this information.) I can think of a couple of ways around it, but not an easy one.

Simplest in theory is to POKE the value of A into the appropriate position in memory so that the GO TO will "see" what you want i t to. It will have to be in ASCII digits. This can work (token lister programs usually work thus), but is liable to be almost impossible if you lack a detailed knowledge of Applesoft internals.

If you want to try, start with a very simple program (just a few lines) and remember that Applesoft programs start at $800. You c an use the monitor to try to work out your target and just keep poking the value of A to a new location until you get it right. (You will need to read in the program from disk again after each failure.) Once you have it, you can recognize the proper look of the target from the monitor and try again for a serious program. Don't expect this to work quickly.

In fact, I checked this out and came up with a working program.

The other possibility is to write a machine language routine that will store this particular variable in the form you want rather
than the usual Applesoft way. Such a routine could be accessed via &, CALL or USR. But you won't need more than this
hint if you have the knowledge of machine language required for this approach.

Having said all that, possibly what you really want is an alternative way of coding some particular problem.

Q. Assuming that I have no disassembler program available, is there an easy solution to outputting to a text file the data from the 'L' command in the monitor?

A. I have a feeling that I have been avoiding this one. I think John asked me once before and I couldn't find anyone to palm it off onto and so conveniently forgot.

Before answering the question, let me point out to anyone to whom it is not obvious, that you

should normally use a disassembler to do this. John is perfectly aware of that.

The short answer is that I don't know of an easy way. But it should be possible. Let's see now.....

To begin with, the monitor 'L' command simply disassembles 20 lines and displays the result on the first text page ($400-7FF).
We had better move them from there before the space is used again for something else. From the monitor, you could type:

2000<400.7FFM

I just tried that and it worked. To check it, I first typed F800L to display 20 lines disassembled (actually the first few lines of the monitor). Then I filled the screen with other garbage and typed:

400<2000.23FFM
as expected, this brought back the original page of display. All I had done so far was to move a page of text up to a free area and confirm that I could get it back on the screen. (See the reference manual pages 44 to 46 and 56 for details of the monitor M(ove) command if it is not familiar.)

From that point, I could BSAVE DISASSEMBLED.STUFF,A$2000 ,L$400 and have a copy on disk. It is fairly easy to change a binary file to a text file in this case, since this binary file is virtually a sequential text file anyway. There is a program called "CONVERT APPLEWRITER TO TEXT" that will do this fairly well, though you will probably have to do a bit of editing to get it just so. (Sandy's word processor is good for the editing.) There will be some extra bytes to edit out also, as will become apparent.

A second method would be to use BIG MAC to read in the binary file and read it out again as a text file. But I suppose that is cheating, since if you have BIG MAC then you have a disassembler anyway.

A more direct route is to look at the program on disk with a DISK ZAP style program and change the file type character from 04 (or 84) to 00. See the DOS Manual pages 129 to 131 for further information if this is not clear. (Or see my DOS notes, or Beneath Apple DOS if you have either.) There are programs of this type available on Club disks, though there are better ones available commercially.

All DOS commands work from within the monitor, so you could also just produce a textfile directly. This is not as easy as it sounds, which is why I didn't mention it first. In fact I will probably write an article on this subject one of thesedays.

By whatever means, this gives you a textfile containing the information. If you wanted more than one page, you could move successive text pages to successive memory areas ($2400-27FF, $2800-2CFF and so on) and BSAVE all of this in a single file. You would certainly find that you wanted to edit this a little.

At this point, in a sense I have answered the question completely. But I have hidden one of the biggest problems. The text screen is not displayed in order. See page 16 of the reference manual for how it is displayed. The first line starts at $400 as you would expect, but the second starts at $480. There is a line starting at $428. However, it is not the second but the ninth line.

Of course, provided you only want to map things back to the text page, this is all perfectly acceptable. But it is not acceptable if, for example, you want to print out the textfile.

As usual, once you understand the problem, you are a fair way towards answering it. If we were to move individual lines rather than the whole page, all would be well (provided we did it in the appropriate order). In fact, provided you don't mind a bit of tedium, you can do the move by typing in:

2000<400.427M
2028<400.427M
2050<400.427M
2078<400.427M
etc.

where you are taking advantage of the fact that the display scrolls up one line each time. Notice that this gets a little out of step with the numbers on page 16 from 2078 on. That is because there are actually 64 bytes (sixteen bytes on each page) not displayed in text. These are used by peripherals in corresponding slots if you number each group of eight bytes 1 to 8. I have also not taken into account that there are only twenty lines that you really want.

Sorry, that doesn't actually quite work. I tried it later and found I had forgotten that you get two lines scrolled rather than one. Try something like:
2000<400.427MN2028<480.4A7M
if you really want to pursue this one. The N (for normal) acts as a separator between monitor commands.

I mentioned that as a possibility, but it is far better to make the move as we first discussed it and then write a little machine language program (or even a BASIC program) to move it one text line at a time to a new area, possibly starting at $3000, from which we will eventually BSAVE it. That would have the advantage that you could reuse the area $2000 23FF for further disassembled lines.

Incidentally, it is far more natural in all of this to use binary

files rather than sequential textfiles. John never did say why he wanted text files, but I would use binary unless there were a good reason why not.

A variant on the above would be to simply BSAVE the text page as some file name or other and then (if necessary) convert that to a textfile as before. I did that, using the disassembly of the first few lines of the monitor as my example. It looked terrible when I loaded it into Sandy's, but, when I eliminated the first few bytes (length information of the binary file) and the 64 non-printing bytes discussed above, I got:

```
*F800L
F800-  4A       LSR
F801-  08       PHP
F802-  20 47 F8  JSR  $F847
F805-  28       PLP
F806-  A9 0F     LDA  #$0F
F808-  90 02     BCC  $F80C
F80A-  69 E0     ADC  #$E0
F80C-  85 2E     STA  $2E
F80E-  B1 26     LDA  ($26),Y
F810-  45 30     EOR  $30
F812-  25 2E     AND  $2E
F814-  51 26     EOR  ($26),Y
F816-  91 26     STA  ($26),Y
F818-  60       RTS
F819-  20 00 F8  JSR  $F800
F81C-  C4 2C     CPY  $2C
F81E-  B0 11     BCS  $F831
F820-  C8       INY
F821-  20 0E F8  JSR  $F80E
F824-  90 F6     BCC  $F81C

*  B  S  A  V  E
TEXTSTUFF1,A$400,L$400
```

This isn't quite as expected, but the page did not have the first disassembled line right on top. Clearly, it would be possible to arrange these lines in order using Sandy's (or other word processor or text editor). Repeating the exercise would produce further textfiles which could be joined to make as long a disassembly as needed. Nothing has been lost, though we have manag
ed to pick up a couple of unwanted lines (those starting with the asterisks).

It won't be possible to show in the magazine, but these lines were quite disturbing to look at in the word processor. There are
no carriage returns anywhere, and everything ripples as you look at it. For serious use as a textfile, this would
have to be changed, but that would make it the harder to put back to screen if you wanted to.

To really make all this tidy, you really should write a machine language program to do it all, including calls to the monitor a
nd to DOS. Having done that, you would, of course, have written a substantial part of a disassembler.

So you couldlook at this whole column as a thinly disguised tutorial on how to write an Apple disassembler.

Q. If DOS crashes how can I reboot DOS, keeping both program and variables intact?

A. There are a few things to try here. First of all, get to the monitor by CALL -151 and then type 3D0G. That reconnects the DOS h
ooks (does a DOS warm start) if they have merely been disconnected. 3D0G should give you back an Applesoft prompt, which is therefore a hopeful sign.

If that doesn't work, then more damage has been done than merely losing the hooks. A cold start by 3D3G (from the monitor) is l ikely to destroy the program, so we have to go to the actual DOS routines. Actually, you can use 3D3G provided you can restore the first two bytes of the Applesoft program at $801 and $802, but that still loses the variables. (Restoring these two byte s means to make them point to the start of the second line in the Applesoft program - recognizable because it points to the third.)

If 3D0G doesn't work, it is possible that the jump instruction there has been clobbered. In that case, you can type 9DBFG and a chieve the same result. If that works, you should SAVE what you have and reboot, because this does not restore the page 3 locations. You can also type 9D84G and achieve the same result as a 3D3G (and the same problems).

If nothing works up to here, you have troubles! It is possible that part of DOS is still alive which would enable you to possib ly load the rest as a machine language program provided you had thoughtfully stored it as such in advance. This is not a straightforward option and I don't recommend it to anyone who needs to ask this kind of question. The last option, and one which will always work provided you have prepared in advance, is to load in a copy of (slave) DOS from cassette tape. Of course, this means you must have saved DOS on tape in advance to prepare for just such an emergency. Alternatively, you can store it on tape from another Apple (see page 46 of the Apple II reference manual for how to do th at - the memory locations are $9600 to $BFFF).

Q. Can I replace the DOS CHAIN command (which applies to INTEGER BASIC only) with the Applesoft version so I don't have to BRUN CH AIN?

A. In short, no. The CHAIN program is $1A1 bytes long and you don't have anything like that much free space within DOS counting al l there was initially and all you could free up by deleting the CHAIN command. However, if you are prepared to permanently increase the length of DOS by roughly two pages, then you can achieve the functiona l equivalent. You still give up the INTEGER CHAIN, which

starts at $A4F0, but you have to relocate CHAIN (the program) at a location where it can be permanently in memory. The obvious place is between DOS and the buffers.

If you seriously want to do this, you should start by relocating a copy of CHAIN to run at $9B00 and saving it on track two. Yo u will need to look at Appendix C of the DOS manual or preferably at my DOS notes to see how to get it there. Relocation is easiest done using the programmer's aid, though it can be done by hand. (It isn't necessary to save to track two, but it seems the aesthetic thing and it has the advantage of making CHAIN easy to move with DOS.)

Now you can either alter DOS to load the extra two sectors and start the buffers two pages down, or have your HELLO program loa d CHAIN and alter the pointer to the buffers at $9D00. The latter is easier, the former makes a better job.

Having described all that, the actual coding should be fairly easy for someone with a good knowledge of DOS. (It should be a go od exercise for any graduate of my DOS classes.) Is there anyone else in the club that would like this on a library disk? From Col Rutherford (who really understands much more of the problem than the question suggests) Q. Is there a bug in the INT function in Applesoft? For instance, I typed, in immediate mode:] PRINT INT (8.95 * 100) 894] What is going on? A. This is a nasty one for people unused to binary computers. The Applesoft manual (page 102) says: INT (aexpr) Returns the largest integer less than or equal to /aexpr/. In fact that is just what happened and there is no bug here. We are misled by the fact that we have ten fingers. (Or at least b ecause we use decimal arithmetic.) The problem is that 8.95 is not a terminating BINARY fraction - it starts out as 1000.11110011 etc. Applesoft uses 32 binary digits of precision in storing real numbers and binary rounding will obviously produce a number either a little larger or a little smaller than the exact decimal. If a little smaller, as in this case, then we get the "anomalous" result reported. It is not hard to produce equally "anomalous" results resulting from small roundoff errors the other wa y. The main thing is to recognize that the computer has not done anything odd at all. We chose (or Microsoft did) this definition of the INT function and it has worked as advertised, even if we are surprised at the result. To get an INT function that rounds off instead of truncating, we can change the line to: A = (8 . 9 5 * 1 0 0) : P R I N T INT((100*A+0.5)/100)

That will make sure that we print a rounded INT function rather than a truncated one. But the computer is not at fault because INT was defined differently. Actually, there is a possibility of using BCD mode (which actually uses decimal arithmetic) on the 6502. However this option is only open to machine language programmers. (I have vacancies for the machine language course later in the year and this is a hint!) This problem is much more important for what is left unsaid. We all know that we are using binary computers, but it is necessar y to think about what you are doing every time you use numbers. We are almost as stupid as the computers, after all. From Tony Morrison. Q. How can I get BIG MAC to work in 80 column mode? (I have had this question for both II+ and IIe versions.) A. At present, I don't know. Can anyone help with this? From Robert Gilchrist. Q. How can I get an 80 column display with Apple IIe, 80 column text card, Vision 80 128K card and VISICALC? A. Again, I don't know. Has anyone used this combination? (I imagine that you either need some kind of a preboot or else you need to break the VISICALC to allow m o d i f i c a t i o n .) QUESTIONS & ANSWERS Q. Inverse and flashing file-names can be used from the keyboard. How can I access them from a BASIC program? A. I don't see this as a serious problem. What's wrong with forming a string with the appropriate characters? (You find them on page 15 of the Apple II reference manual.) Such a string is used in the HELLO program that appears on most of my disks. (Ask me for a copy if you really can't find one floating around!) I might add that I dislike inverse and flashing filenames almost as much as I do filenames with "hidden" control Q. How can I get BIG MAC to work in 80 column mode? (I have had this question for both II+ and IIe versions.)

A. At present, I don't know. Can anyone help with this?

Q. How can I get an 80 column display with Apple IIe, 80 column text card, Vision 80 128K card and VISICALC?

A. Again, I don't know. Has anyone used this combination? (I imagine that you either need some kind of a preboot or else you need to break the VISICALC to allow modification.)

Anonymous.

Being clumsy, I have developed a habit of starting a session with my word processor by typing "DELETE FILE" instead of "LOA D FILE". Help!

A This is an easy one.
I have sent you a copy of a utility called UNDELETE. Provided you

use it before compounding the problem, all should be well. Leave your wordprocessor (you would leave Sandy's by typing CONTROL-D twice), LOAD UNDELETE from the utility disk, swap the disks back again and type RUN. From there, just follow the instructions.

This utility is on my DOS COURSE disk if anyone needs it. It is in the public domain, so anyone with the disk should feel f ree to pass it on. (Same with any public domain programs from my disks.)

I might point out that you obviously don't use Sandy's word processor. Sandy makes it almost impossible for errors like thi s to happen because you have to spell out the DELETE but LOAD is a single key command.

SAVE is single key, but Sandy's won't attempt to SAVE an empty file. It isn't perfect, but Sandy is always upgrading and listens to suggestions.

Q I have read about "R" and "S" files, but I don't understand them. What are they and what do they do?

A Neither of these file types is regularly used. Apple have made one use of "R" type files in the Applesoft toolkit (they are relocatable machine language files), but nowhere else to my knowledge. I have seen "S" type files in one commercial program but I don't immediately remember which one and I have never got round to checking the usage. The short answer that you are unlikely to see either unless you use the toolkit extensively. On the other hand, it is easy to play around with file types yourself and, for instance, display all "A" type files as "S" type or even "X" type. To do that, just POKE 45993,216 (X has ASCII code D8 =216, 45993 = $B3A9). POKE the same location with 193 when you get tired of lookin g at X files.

These POKES will not do anything permanent unless you INIT a disk while they are in force. Otherwise, merely rebooting will get things back to normal. I should mention that NIBBLE magazine had a long series entitled FUN WITH THE TOOLKIT which provided a lot of information a bout this valuable utility. From Richard Colley again.

Q I would appreciate information on how to use the "&" command to transfer information between BASIC and machine language.

A There is no very short answer to this one, though I will provide an example below. I deal with this subject in my assembler language course and will deal with it at more length in my MASTERING MACHINE CODE ON YOUR APPLE II, which should be available around March next year. But, in the meantime, the best sources of further information are the first CALL A.P.P.L.E. IN DEPTH volume, "All About Applesoft" and the various "Peeking at CALL A.P.P.L.E." volumes.

Briefly, the & command in Applesoft acts as if you had typed CALL 1013 (3F5 hex). At $3F5 you can store a jump command, say: 4C 00 80 JMP $8000 this transfers control to location $8000 where you will have previously stored a machine language program to do whatever you wanted. For instance: 8000- 20 3A FF JSR FF3A ;ring bell 8003- 20 3A FF JSR FF3A ;ring bell 8006- 20 3A FF JSR FF3A ;ring bell 8009- 20 3A FF JSR FF3A ;ring bell 800C- 20 3A FF JSR FF3A ;ring bell 800F- 20 3A FF JSR FF3A ;ring bell 8012- 4C 58 FF JMP FF58; Go back to the BASIC program You can type all this in by: CALL -151 (to get into the monitor) 3F5:4C 00 80 (return) 8000:20 3A FF 20 3A FF 20 3A FF 20 3A FF 20 3A FF 4C 58 FF (return) CONTROL-C (return) (getting back to Applesoft) Now type FP (to get rid of any old Applesoft program hanging around) 198N APPLE HELP ---------- Thanks to Washington Apple Pi for some clues.

Q. I'm working on an inventory program written in Applesoft and am using text fi les to store data to the disk, but I always get an END OF DATA error when I try to read the data back in. What am I doing wrong?

A. I have reproduced the relevant parts of the program below. 10 D$=CHR$(4) For writing: 300 PRINT D$;"OPEN DATAFILE" 310 PRINT D$;"WRITE DATAFILE" 320 PRINT A,B,C 330 PRINT D$;"CLOSE DATAFILE" For reading: 400 PRINT D$;"OPEN DATAFILE" 410 PRINT D$;"READ DATAFILE" 420 INPUT A,B,C 430 PRINT D$;"CLOSE DATAFILE"

The problem is that when you input numbers (or strings) from the disk you need some delimiter to indicate where one number ends and the next begins. If you do a PRINT A,B,C to the screen the numbers are separated by spaces, but the Applesoft INPUT-command does not recognise the space as a delimiter.

Even if spaces were valid delimiters this situation wouldn't work because DOS strips away all the spaces leaving the numbers bunched together when written to the disk.

The solution is to explicitly provide a deleimiter between the numbers. One way to do this is to "print" a carriage return after each number. 320 PRINT A:PRINT B: PRINT C

Each PRINT command results in a number and a carriage return being written to the disk. Another equally valid way of doing this is to print a comma between the numbers. 320 PRINT A ;","; B ;","; C Or, since semicolons are not needed between variable names and literal strings, this also works. 320 PRINT A "," B "," C

The easiest way to track down these kinds of problems is to use the DOS command MON I,C,O, so that all data read from, or written to the disk, will be printed o n the screen.

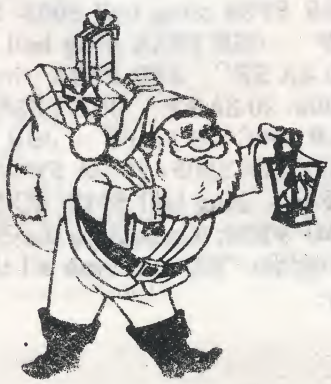
Q. When trying to print out some labels , I found that I couldn't TAB past 40 without starting on a new line.

A. PRINT TAB(0-40) works well on the text screen and some printer interface card s but on others it goes to the next line. To solve this problem it is better to write directly to $0024 (CH) which stores the horizontal cursor position. 1000 POKE 36,I: PRINT "I = TAB POSN" Interestingly, it is also possible to use this location to read from.
1001 POKE 36,(PEEK(36)-1) This will cause the cursor to backspace The mate of this address is $0025 (CV).
This can be used in an interesting techn ique for checking whether text has reached the bottom of the text screen, you ca n then stop the display and ask for a reader's response. 2000 IF PEEK (37) <21 THEN GOTO 4000 4000 PRINT "'RETURN' FOR MORE, 'ESC' TO MENU" 4010 GET A$: IF A$= CHR$(27) THEN 1000: REM CHR$(27) = 'ESC'

Q. How do I run a program other than BASIC at PR#6.

A. It is of course possible to write a small program to do a CATALOG or BRUN a p rogram. However it is also possible to modify DOS to do so. Location $9E42 in the DOS will contain one of four values. Derpending on the con tents, the DOS seeks a different file type for the greetings program. The values and file types are as follows:
$06 Run a BASIC program on boot-up $14 EXEC a text file $34 BRUN a Binary file $20 do a CATALOG To change from booting to a BASIC program, a change must be made to the DOS on the disk to be booted. This can be done in one of two ways: change the DOS in memory and then INIT a disk (resulting in a modified DOS on the disk), simply POKE-25022. Or use a disk editor program, like Disk Zap, to change the DOS on an existing disk. The byte of interest is found on track 1, sector 0 for a 3.2.1 disk, and on track 0, sector D for a 3.3 disk, for those willing to Zap a disk instead.
100 HOME:PRINT"START OF PROGRAM" 120 PRINT:PRINT"THIS WILL RING BELLS" 140 & 160 PRINT"END OF PROGRAM" 200 END Now RUN this program and you should have demonstrated a use of the & command.

Q I have an automatic ICE card in my Apple and now I can't get CP/M to work. Help!



A This has been my most frequently asked question over the last two or three months.
The answer is to get hold of a copy of C P/M version 2.23, 60K CP/M. This works perfectly with the ICE card.

That solution is not available if you don't have a 16K (or larger) RAM card. Such things are now sufficiently cheap that ev eryone should have them. As a matter of fact, since I am changing over to 128K cards, I have a couple for sale at present for quite reasonable prices. If you are seriously running CP/M, you need a total of 64K RAM in your Apple to allow for running major applications programs like DBASE II. Having more RAM is convenient for machine language programmers or those wanting to use phantom disks, but is not essential for CP/M work.

The ICE card appears to be the best Apple parallel printer interface card available at the moment, having quite a bit of graphics dump capability built in for most popular printers. You should always see interface card and printer working together before purchase, of course. If you really can't manage the CP/M 2.23 and 16K card, you can simply remove the ICE card temporarily to run CP/M but you will need some other card to interface to the printer.

(Many thanks Ken -
wherever you are!)

AppleShare and the Apple II

After what seemed an interminable wait following the Mac and MS-DOS versions, Apple released AppleShare support for the Apple II computers last September. The AppleShare IIgs WorkStation Software used the IIgs's built-in AppleTalk facility to connect to AppleShare and an Apple II WorkStation Card was released to connect (128K enhanced) Apple IIe's to the network.

The AppleShare IIgs Workstation Software used the equivalent of System Disk 3.2. The incorporation of AppleShare support into the new IIgs System Software 5.0, however, does away with the need for special workstation software and has produced an environment that we hope to adapt to our office situation. We'd like to share some of the details we've discovered for others interested in seeing what networking may mean to their future and to the continuing future of the Apple II.

The intent of a network is to let several computer users have common access to the same resources. This allows, for example, many computers to share the use of a single large hard disk for mass storage or the use of a single printer. Even with the added expense of the extra hardware and software needed to operate a network, the ability to share resources that each individual on the network may use only a small percentage of the time can offset the extra expense. For example, it is more sensible for several computers to use one expensive LaserWriter on a network than to buy a LaserWriter for each computer. Each individual user usually won't keep a printer busy 100 per cent of the time and an idle printer may as well be put to use by someone else.

The network also saves time by automating the use of a network resource. Several users can share a printer attached to a computer dedicated to printing documents, but each person has to constantly check to see when the computer and printer are available. In a network situation, a computer can be configured as a print server to accept print requests from other computers on the network. The documents in these requests can be accepted, stored on the server's mass storage device, and sent to the printer one by one as the printer becomes available in a process called spooling. This keeps users on the network from having to wait for the previous printing job to complete itself and makes it appear almost as if they have exclusive access to the printer.

Flexibility can be added by using the network's ability to connect several alternative printers for selection by a user. An ImageWriter II may be selected if it is deemed more suitable for a printing task than a LaserWriter. Various printers can also be prepared to print on specific letterhead or forms and users can route their document to the printer with the proper configuration. A network "Chooser" program can be used to select the proper printer, and a "Namer" can be used to give the printer a representative name (such as "Letterhead") if desired.

In addition, AppleShare can facilitate accessing of common files by users, either by sharing the use of programs, by transferring data via inter-user "file copy" operations, or by allowing several users to operate "interactively" on a file. AppleShare as supplied by Apple is not sufficient to carry out these activities by itself; for example, there is no "mail" system in place for Apple II users yet. Appleshare does support mechanisms to implement such a system, though. Multi-user applications are not common now, but AppleShare for the II is new and such applications (we hope) will come.

Apple refers to the basic network unit as LocalTalk. Each LocalTalk network can contain up to a total of 32 devices (a mixture of computers, printers, or other AppleTalk devices). LocalTalk networks can be connected to each other or even to other types of networks to form an internet using an interfacing device which Apple refers to as a "router" (you may also see it referred to as a "bridge"). The networks within an internet can also be grouped and identified to the network as zones. Internets can be very large and complicated; we'll stick with AppleShare in a simple single LocalTalk unit for our discussion here.

Ingredients for an AppleShare system include a computer to manage the network resources (the server), the computers individuals use to connect with the network (workstations), and any supporting hardware that people on the network may want to use (printers are a common example).

The most useful peripheral you can add to a network is a hard disk. The software for sharing a hard disk is called a "file server"; in computer jargon, the computer managing the network, the hard disk, and the software are often called "the server". It's helpful to remember that to a user "the server" looks like and acts like a relatively slow hard disk connected directly to the user's computer, except that other users can also access it.

In AppleShare, a dedicated Macintosh must be used as the file server. "Dedicated" means the Mac can only be used to run the server software; it will not be available to run Macintosh software. You'll need at least one hard disk attached to the Macintosh to use as the server volume accessible to the other computers on the network. Additional server volumes (or even servers) can be added to the network if desired.

The most useful peripheral you can add to a network is a hard disk. The software for sharing a hard disk is called a "file server."

To prepare the Macintosh for use as a server, you'll need Version 2.0 or later of the AppleShare File Server software ($799 per server); previous versions do not support Apple II workstations.

If you plan to use network printers, you may also want to obtain the AppleShare Print Server software ($299 per server) that allows the server to arbitrate printing jobs to up to five printers assigned to the network. This arbitration includes the "spooling" ability mentioned earlier. You can also elect direct access to any of the five "captured" printers, or to additional printers available on the network, but these direct print jobs won't be automatically spooled by the server if the selected printer is busy. You'll have to wait for the printer to complete any previous job before your computer can begin its printing operation.

An ImageWriter II or ImageWriter LQ can be added to the network if an ImageWriter II/LQ AppleTalk Option ($139) is installed. The LaserWriter, on the other hand, includes an AppleTalk interface; the expense of a LaserWriter becomes more justifiable as you increase the number of workstations that use it, especially if you need high-quality printouts. If a user desires a "local" printer dedicated to his workstation alone, one can be connected via a normally configured serial port on the workstation.

Apple II workstations can be 128K enhanced IIe computers with an Apple II Workstation Card ($249), or a 512K (minimum) Apple IIgs using its internal AppleTalk hardware. To boot from the server, you must upgrade the IIgs memory to at least 768K. Apple II Workstation Software for the IIe is supplied with the Workstation Card. The Apple IIgs workstation support is integral with IIgs System Software 5.0; the 5.0 distribution package even includes a Macintosh-format disk with the new system software update ready to install on the server.

To connect the server, workstations, and peripherals you can use LocalTalk connector kits from Apple dealers, or alternatives such as PhoneNet (from Farallon Computing, 2150 Kittredge, Berkeley, CA 94704, 415-849-2331) or DataSpec ModuNet (from ***A2-Central***) connectors. We recommend the alternative methods because they use very inexpensive four-conductor phone wire for connections, as opposed to Apple's expensive LocalTalk cabling, and often offer more flexibility in configuring the network topology ("topology" refers to the "shape" of the network based on the path of the connections). You need one connector for each device (computer, printer, etc.) on the network.

To make the Mac usable as a server, you first install the server software. The file server software comes in two "flavors": one set of disks for the Macintosh 512e, and another set for the Macintosh Plus/SE/II series. Apple does not encourage using a Mac 512e as a server and recommends an upgrade to the minimum of a Mac Plus. The software disks include the Macintosh Installer program, with "scripts" for the installation of version 6.0 of the Macintosh System Software and the server software for the various members of the Mac family. Also included is the application *AppleShare Admin*, which allows the network administrator to prepare the server to accept users and to control the access users have to various files on the server. You use the Installer to place the necessary software on the hard disk to be used as the server volume.

An Apple II Setup supplemental software disk is provided with the AppleShare server software version 2.0; this disk contains the equiva-

lent of IIgs System Software 3.2. IIgs owners will want to be sure and use the Apple II Setup disk that comes with System Software 5.0 instead. The Apple II support must be installed to allow use of Apple II workstations with the server.

The Print Server software is sold separately, and its use is optional. If you do decide to install the print server support on your file server, you can elect to have the print server run "concurrently" with AppleShare; that is, when the file server is running, the print server software is also active.

After you have installed the server software on your Macintosh boot volume, you need to run *AppleShare Admin* to prepare the hard disk for use as a server volume. On our system, we elected to actually use an external hard disk as the server volume and reserve our Mac SE's internal hard disk for use in case we needed the Mac for itself (be assured this is a rare occurrence). We connected the external drive to the Mac SCSI port and prepared it for use, then "skipped" the internal hard disk when selecting volumes for use as server volumes. One of the options within *AppleShare Admin* is "Select Concurrent Startup Application" (below the "Server" item in the menu bar); here is where you can elect to have the printer server functions (if installed) also enabled when the server is powered up.

Once completed, when you start up the Macintosh from the server volume you are eventually greeted by the AppleShare status display screen, unless you have the print server set to run concurrently (in which case the print server status screen will be presented). The status screen information is basically limited to showing the available server volumes, the users that are using the server ("logged in"), and the activity of the server regarding the network as a scale from "idle" to "busy".

The *AppleShare File Server Administrator's Guide* and the *Supplement for Apple II Workstations* supplied with the AppleShare software explains most of the details of working with the server itself. The organization of the users and their folders on the server requires some planning.

System administration is the most complicated part of working with AppleShare. Administration involves creating and identifying the users, groups, and "folders" (subdirectories) on the server volume in such a manner that everyone has access to what they need, but no one has access to places they shouldn't be allowed. A "user" is an individual who should be allowed access to the server through a workstation. A "group" is a defined set of users; a group is usually created to give several users a common set of privileges to access files or folders on the server. A server "folder" is analogous to a ProDOS subdirectory.

There is a "Startup Info" option to allow defining the startup application, user prefix, and default printer for the displayed user.

The first time you run *AppleShare Admin*, you must supply a name to identify the server (computer) on the network, and a password to use when working at the server to allow future access to the administration program. The password keeps someone from just walking up to the server and identifying themselves as the administrator; however, the password won't prevent someone from booting from a floppy on the Mac and re-formatting the server volume. For the latter reason, you need to keep the server in a physically secure place away from possible vandals or someone who may destroy your work while "playing" with the server files.

To activate the Apple II functionality of the AppleShare server from *AppleShare Admin*, you select the "Server Info" item from the "Server" menu. In the window that appears is a checkbox item marked "Apple II Admin"; mark the box and wait a few moments for the server to prepare itself. Once this is complete, an "Apple II" item at the far right of the menu bar will activate.

Each user is added by selecting "Create User" from the "Users" menu. In the "User" information box that appears, you then enter the name of the new user; this should correspond to a valid ProDOS filename since it is also used as the name on a folder containing the user's parameters. An initial password can be specified and the administrator can select whether the user is allowed to change it (currently, IIe owners do not have a way to do this from the workstation), and whether the user is allowed to log in. Press "Return" to save the user name and you will see the name show up in a "User List" window on the desktop (if the window isn't open, it can be displayed from the "Users" menu). Up to 8190 users can be registered. Once a user is created, the lower half of the "User" window becomes active which allows you to specify "groups" to which the user belongs, and the startup prefix and application as well as a default (network) printer for the user.

In the "Apple II" menu, there is a "Startup Info" option to allow defining the startup application, user prefix, and default printer for the displayed user. The startup and prefix options are used for situations where a workstation is booted from the network rather than from a disk drive attached to the workstation; once the user identifies himself by logging in to the server, the startup application is executed and the working prefix for that user is set to the indicated folder. On our system, we created a specific folder for each anticipated user on the system, transferred ownership of the folder to that user, and entered that folder's pathname as the prefix for the user. For a startup application for the IIe, we specified BASIC.SYSTEM; for the IIgs users, we specified the System 5.0 Finder once we had completed the IIgs System Software installation from a workstation.

Access privileges for folders can be set by the administrator for any folder on the system. This means the administrator can see everything on the server, including files and folders other users "own". In addition, a user is given ownership for any folders the user creates; the owner is allowed to modify the access privileges for the folder and files (including other folders) later added to it.

AppleShare Admin allows you to assign users to a group via the "Create Group" item on the "Groups" menu. A window will open that allows you to name the group, and then you "drag" a copy of the icon of any user you wish to add from the "Users" window to the "Members" list in the "Group" window. You can also select an existing Group for modification by double-clicking on the Group name within the "Group List"

Preparing the IIe workstation. On the IIe, the workstation card can be installed in any available slot; we used slot 1 since the card imitates a more "classic" serial interface in addition to the AppleTalk port and can double as a printer interface card for a serial printer without AppleTalk. After making a working copy of the disk included with the Workstation card, the copy can be booted from a drive attached to the IIe. A menu is presented; among the options are "Log in to a file server". If you select this item, you will be prompted to "Select a file server" (if you have more than one server on the network). Once the server is selected, you are able to elect to log on as a "Guest" (a user who has not been identified to the server), or as a "Registered User" known to the server. If you select "Guest", you will be able to access the server with privileges allowed to a generic "<Any User>" as defined by the administrator. If you select "Registered user", you will be prompted for your user name and password; if you supply a correct combination, you will be given access appropriate to your user name.

You can also elect to boot from the server by booting from the Workstation card as if it were a disk drive interface. The exception is that, when using a command such as "PR#n" (where "n" is the Workstation card's slot) to boot from BASIC, you must hold down the open-apple key as you press "Return" to execute the command. Your system will be booted using the ProDOS 8 version available on the server, then you will presented with the log in screen prompts mentioned previously. When you log in, you will be assigned the prefix specified for your user name (or "<Any User>") and the associated "startup" application will be executed. The default is normally BASIC.SYSTEM in the SYSTEM folder created when the server is prepared, but the administrator has the power to change this.

The Apple II Workstation software supplied has several useful network utilities: a Chooser to select the network printer or other resources you need, a Namer to alter the name of certain devices on the network (so far, we've been able to stick to the defaults), a version of System Utilities which will work on network volumes, an Access program so you can review and change access privileges on folders (where permitted), and a program to allow you to log off from the network gracefully. You may want to copy some or all of these utilities to the network volume; if you intend to use a IIe as a "diskless workstation" (using only the server volume as a disk drive), you will definitely need to place the Chooser, Access, System Utilities, and Logoff utilities in an accessible folder on the server volume.

We found most of the utilities reasonably usable, although some-

what confusing at times. System Utilities is not our favorite set of file/disk utilities, but most of our "classic" utilities (*Copy II Plus*, Cat Doctor) violate AppleShare programming principles for some functions. The Access program seems to have been designed by a numerologist; rather than using some translation of the Apple Human Interface Guidelines for keyboard commands, Access uses open-Apple non-intuitive number key equivalents for many functions such as "Open". It's difficult to understand how Apple can comment on "inferior" user interfaces when Apple remains guilty of not applying its own principles uniformly.

Finally, the selector Apple supplies on the IIe Workstation disk is not transportable to the network volume, which leaves the user without a method to run the various programs. Apple's solution for this is Aristotle ($199 per server), which is intended for a classroom situation where a teacher assigns lessons to a group of students. We couldn't work with the rigid structure imposed, and instead installed the Windows selector and file reader from our monthly disk to use as a selector for the IIe.

AppleTalk for the IIgs is activated by setting the Control Panel slot configuration to "Your Card" for either slot 1 or 2 (the printer or modem port), and by selecting "Built in AppleTalk" as the option for slot 7 if you have a IIgs with ROM version 01. The LocalTalk (or alternative) connector for that IIgs should be attached to the port assigned to "Your Card" for AppleTalk. To boot over the server, you must also set slot 7 as the boot device; "Scan" won't work.

Chooser on the IIgs is implemented in the Control Panel NDA.

To configure a boot disk to recognize the server, you must use the System 5.0 Installer to install the appropriate support files on your boot volume. If you have an 800K drive, you should select "Appleshare on a 3.5 Disk" to install the files on a copy of your System Disk. This option will remove many files from the boot disk, including BASIC.SYSTEM and BASIC.LAUNCHER, in order to free enough room for the AppleShare support files. If you intend to use additional fonts, desk accessories, etc., that GS/OS expects to find on your boot volume, you are probably going to need a boot volume larger than 800K, such as a hard disk. The alternative is to use the server as the boot volume and configure it appropriately.

If you boot the disk configured for AppleShare while AppleTalk is active during the boot, you will be prompted for a user name. Upon entering the Finder or another IIgs Desktop-based program, select the Control Panel NDA and click on the AppleShare icon. If a server is found, you will be asked to select the server you wish to use (in case there is more than one); in the same window your user name is displayed to accept or modify. Once you have elected to log on, you are prompted to specify whether you are to be considered a "guest" or a registered user. Answering "registered user" requires you to verify your user name and enter your password. There is also a "Change password" option available if you want to alter your password periodically for more security. Once you log in successfully, you are asked to mark any server volumes you wish to access. You can also elect to save the server volume selections, your user name, and optionally your password to the disk so that you will be logged on to the server automatically when you next boot the disk. If you don't have tight rein on the disk, electing not to save the password prevents someone who has "borrowed" your disk from logging on under your user name. On the other hand, you can easily have several "user names" for different things you do by creating several boot disks.

When you close the Control Panel window after logging in, an AppleShare Icon will appear on the Finder Desktop that can be accessed as a disk drive. If you double-click on the icon to open it, you'll be presented with a window containing the files and folders in the server's volume directory. There will be some differences from a "standard" device; you can't drag icons from the server onto the desktop, for example. A set of flashing arrows to the far left of the menu bar indicates communication with the network.

You may also notice some file or folder names that don't follow the ProDOS FST naming conventions. On the IIgs, GS/OS interfaces to the network using a special AppleShare FST (file system translator). This FST is not confined to using ProDOS filenames so you can use Mac-like filenames of up to 30 characters and containing any ASCII character except the colon (":"); names such as "Apple //gs" are legal on the server. In GS/OS applications, the colon will replace the ProDOS FST "/" path/filename separator for any such names; you'll notice that pathnames that are displayed under ProDOS 8 as "/SV/ANY.USER/" will be displayed as ":SV:ANY.USER" from GS/OS applications. Be careful with using non-ProDOS names for any files you may want to access from ProDOS 8; illegal characters will be translated to question marks ("?") in file displays, and you won't be able to access these files. Files with illegal ProDOS names will have to be renamed when moved to ProDOS volumes.

With the configured AppleShare boot disk, you can access the server volume from a IIgs. Once you install System Software 5.0 on the server volume, you will also be able to boot a IIgs from the server. You need to have read, modify, and write privileges for the SYSTEM folder on the server to install 5.0; in our case, we created a user named "Admin" that the administrator could use to log in from a IIgs, giving him free rein. From the IIgs, Installer was used to put the "Latest System files" on the server, as well as the server volume version of the AppleShare support files ("Server network startup"). Verify that you have any needed drivers (including printer drivers) installed on the server for all IIgs configurations anticipated on the network.

To log off the server, just drag it's "disk" icon into the trash can.

To boot the IIgs from the server, do a "control- open-Apple- reset" (or power up the computer) while the server is active. You'll see a series of "moving dots" on the text screen below the "Apple IIgs" indicating the server is communicating with the IIgs, and then a "Starting up over Mac Server" as the server sends some additional information to the IIgs. Next, you are presented with the text-based "Log in" screens described for the IIe Workstation software. Once you have identified yourself, the server boots you through GS/OS; the process takes less than two minutes to reach the Finder Desktop (our IIgs startup application) if you are the only user on the network.

Finder will always throw you into the root directory on the server, and therefore the "prefix" items we have defined aren't really of consequence here. The user folders we designate are designed to serve as the application folder for any "private" applications a user wishes to install and run on the server volume.

On the IIgs, when you open a folder on the server any restrictions on your access to the current contents are displayed in the upper left-hand corner of the window. A "pen" with a line through it indicates you can't modify the contents of the folder. A crossed-out file folder means you can't see enclosed folders, and a crossed-out "document" icon means you can't see any enclosed files.

For folders within the window, various shadings of each folder indicate any restrictions on your access privileges. If you have the correct privileges, access attributes for a folder can be modified from the Finder by highlighting a folder's icon and selecting the "Icon info" item from the "Special" menu. A dialog resembling a spiral-bound card deck appears, and one of the descending "index tabs" on the deck is "Access". Click this tab to display the current attributes; the card that appears has several boxes with "pop up" menus that allow you to redefine the attributes. Pre-defined options are "Private" (only the owner can see and modify the contents), "Public" (everyone can see and modify the contents), "Drop folder" (everyone can drop files into the folder, but only the owner of the folder can access them), and "Bulletin Board" (everyone can view the contents, but only the owner can make changes). You can also customize the access privileges of "See Files", "See Folders", and "Make Changes" for the "Owner", a specified "Group", and "Everyone".

Chooser on the IIgs is implemented in the Control Panel NDA. Open the NDA and locate the icon for the type of printer you want and click on the icon. You'll be presented with a list of available printers of that type, from which you can make your selection.

There is only a single SYSTEM subdirectory on the server, which means that any fonts, drivers, FSTs, or other IIgs system support files that need to be available to IIgs's that boot over the network will have to be installed in the appropriate place in the SYSTEM directory. To protect SYSTEM from unscheduled changes, we elected to only allow "write" access to the administrator. Unfortunately, the GS/OS printer Chooser seems to want to save information into the SYSTEM folder; we get an error telling us to contact the System Administrator every time we select the printer. We've made a habit of running Chooser every time we log on.

Most of the user information is kept in a special USERS file on the server which contains a folder for each user (under the user's name).

The user's folder holds the SETUP folder with user settings; other network-aware applications can store configuration information in the user's folder. SETUP can also hold any private initialization files, such as desk accessories that users want executed only on their machine when they boot GS/OS from the network. Desk accessories and initialization files that should be available to all users should be placed in the appropriate place in the SYSTEM folder, of course.

The organization of files on the server essentially resembles that for a normal hard disk, except that the organization should be done with the idea that certain applications should be accessible only to certain users. Our assignment of folders is intended to allow individual users to keep "private" applications on the server, as well as have access to "public" information. We have set up our server "/SV/" with the following users:

```
"Admin" group
    Admin

"Teacher" group
    Dennis
    TomW

"Student" group
    Dennis
    Sally
    Steve
    TomV
    TomW
```

"/SV/SALLY/" is a folder on the server that the administrator has set up with (the user) Sally as the owner, and has its access set so that the following privileges are enabled:

	See files	See Folders	Make Changes
Owner	yes	yes	yes
Group	yes	no	no
Everyone	no	no	no

This means that anyone else in Sally's group can see files within the folder "/SV/SALLY", but they can't see any folders. So if "SALLY" contains the files:

```
STARTUP       BAS
APPLEWORKS    DIR
TO.GROUP      TXT
```

another user in the group will only see:

```
STARTUP       BAS
TO.GROUP      TXT
```

Sally can place a file in "/SV/SALLY/" such as "TO.GROUP" that other members of her group are allowed access to view and copy. But the group may not make changes in "/SV/SALLY/", including deleting or renaming files, or copying files into the folder. And since the "See folders" option isn't enabled for the group, they can't even see the "APPLEWORKS" folder that Sally uses. This keeps anyone but Sally (and the administrator, who knows better) from running Sally's AppleWorks.

On our server, we have created a folder "ANY.USER" for "<Any User>" that contains the common utilities needed on the server; things like the Apple II System Utilities, Access, Chooser, Logoff, etc. Apple's licensing for this software has a very reasonable policy of allowing it to be installed for all users on a single server. You therefore only need to purchase one copy of the software for each server in use.

Current programs may work on the server if they are "AppleShare-aware". The *AppleShare Programmer's Guide for the Apple IIgs* (which also applies to the Workstation Card for the IIe) classifies programs as single-user (allows one person to make changes to the program's files), multi-user (allows many users to make changes to the same data file), single-launch (only one user may launch and use the program), and multi-launch (many users may launch and use a copy of the same program).

Programs that don't write to data file files should be multi-launch. Examples would be many games that just "load and run" and don't save player information on the disk.

Programs that can be launched and then will write to unique data files are also multi-launch. An example is the ProDOS 8 Chooser facility provided with the Workstation card; the settings are saved on the network in a folder associated with the individual user. The same copy of the master program can be run by several users at once, but the data written will go to a unique file for each user. User information is kept on the server in the folder USERS within a folder with the user's name. This is why the user name must be a valid ProDOS name, so that the user has access to his or her own user information.

Programs that write to a file assuming they will be the only program to access the file are single-user; an example is the classic single-user version of AppleWorks, which always writes updates for user settings to the file SEG.PR in the directory from which AppleWorks is launched. In order to use such a program safely on a network, it should be placed in a private folder belonging to (and only accessible to) a single user.

Whether placing a program on a network is legal is subject to any terms and conditions of use for the program; you should consult the program's documentation or the manufacturer. Normally, a program should not be placed on a network in such a manner that more than one person can use it simultaneously (unless approval is explicitly given for that purpose); to do so violates the intention of copyright by providing multiple copies of a single program to several users.

Multi-user Apple II programs are rare at this stage; an example would be a database that allows several users to access and modify separate records in the same database file at the same time. Such a program must be carefully written to avoid loss of data.

AppleShare causes some headaches with several existing programs. Slot 7 also becomes the printer slot, which confuses some programs into oblivion when trying to print. AppleTalk also generates periodic signals called interrupts which cause programs unprepared for an interrupting environment to have problems in execution. The frequency of the interrupts also cause some communications programs to lose incoming characters. Speed is traded for the network flexibility; as obvious by the boot time for the IIgs, access to a hard disk via AppleShare is slower than for a local disk drive.

AppleShare is not tolerant of using Reset to exit from a runaway program. If you have to hit "Reset", you'll disconnect your workstation from the server; the server will eventually log you off once it discovers you're gone.

Our vision for the AppleShare office is, of course, Apple II based. Two of our IIgs systems are occupied maintaining a large customer database; these are essentially dedicated machines for data entry and generation of the self-mailers you see and other reports and forms we use. We have two IIgs workstations used for writing the newsletter, programming, testing, and other general purposes. One IIgs also has a modem attached for getting our mail from GEnie and other services. We also have a couple of IIc's used for other tasks. We also have a "computerized typesetting terminal" (it says "Macintosh" on the front, but that's a coincidence) that we use for desktop publishing of the newsletter itself.

One plan we have for the network is to be able to facilitate an internal electronic mail system. In addition to passing messages and files from one workstation to another via the server, we'd like to have one workstation able to dial up GEnie under program control, download our mail, identify the recipient(s), and distribute it to the appropriate people without having to have someone manually log in, grab the mail, and sort it every morning. If the system could do this just before we open for business in the morning, that would free up the computer with the modem for an extra hour or so each day.

Another plan is to create a multi-user database so that we can have more timely access to the customer file. Currently, we are so busy working with the database that we usually can't look up items until the database hits an "idle" period; these are few. While we may not want to have several people able to actually modify data in the same database, which can be facilitated with AppleShare, it would be very helpful to be able to access the current data from several "terminals" within the office. If we decide to keep the data entry secured to one person, another person could call up a customer's record, make note of any orders or changes, and "mail" the result to the Keeper of the Database to record the transaction.

We aren't aware of current software that will facilitate these tasks, so we are experimenting with writing them internally. We'd be interested in hearing about any products applicable to these tasks, as well as products that could be used in the Apple II network. -DJD

'APPLECATIONS'

Copy is always needed for the user group magazine. This can be; programs, or useful subroutines - with suitable documentation. The greatest value is obtained when a technique can be understood by the readers so that it can be further utilised. Articles on specific topics may be paid for at the discretion of the editor. Reviews are popular because they enable other Apple owners to assess the usefulness of a product. Business techniques or modifications particularly welcome. Hardware modifications should be supplied with clear constructional details, and pictures if possible.

All material is preferred supplied in text file format on a disk, and printout. For Apple // - DOS 3.3 or Appleworks files on 5.25 inch, or Macintosh TEXT files on 3.5 inch disks are preferred. Please keep a master copy in case of loss.

Advertising is accepted, sent to the Editor:

1. Ads must be A4 format less 2 cm border.
2. Black ink on white background.
3. Paid for in advance at $125 per page per month. (other formats - contact editor, FAX (02) 523-9420)
4. Dead-line for inclusion 15th. of each month.
5. Free advertising is available for SPECIALS benefitting the members, at the editor's discretion.

Inside pages available only, location at the editor's discretion. Art-work if required, will be charged. Stores wishing to obtain copies of the magazine for counter sales should contact the editor.

Apple Users' Group (Sydney), Inc.

A non-profit making association, the AUG(Sydney) Incorporated has been in existence since 1978.

Meetings are held on Monday from 6.30 p.m. at the:

STEPHEN ROBERTS THEATRE
- UNIVERSITY of SYDNEY -

The First Monday of each month:
General Macintosh Group meeting.
As well as;- Apple Special Interest Groups.

The Second Monday of each month:
General Apple // Group meeting.
As well as; Macintosh Special Interest Groups.

Holiday mondays are cancelled, and joint meetings are held on the alternate meeting monday.

We share experiences, demonstrations, trade ideas, goods, and discuss developments in the Apple world.

Benefits of membership are:
Regular issues of 'APPLECATIONS'
Low-price Bulk /purchase goods.
Access to our Software library.
Access to our Bulletin Board.

To become a member, please complete the Order Form, enclose the correct money, and send it to the AUG(Sydney) - or join at a meeting.
Company, Institution, or Associate-Club membership is available. Special Interest groups are encouraged.

ENQUIRIES: The AUG(Sydney) Inc. has no offices!
Write: P.O.Box 505, BANKSTOWN, N.S.W., 2200
OR Phone: (02) 958-2709 (24Hrs)

MEMBERSHIP FORM

Name:.....Ph:.....

Address:.....

Suburb:.....

State:.....Post Code:.....

New Membership : Joining Fee $15 = $.....
1989/90 Subscription $30 = $ 30.00
Surface Mail for Overseas memb. + $ 4 = $.....
Less student disc.(Proof provided) - $10 = $.....
N.B.Stud.Disc off new membership only =======
Attach cheque or Money Order for TOTAL = $.....

OR: BANKCARD / MASTERCARD, sorry no VISA

Account Name:.....

Expiry date: ..../ 19.. CARD No.:

.. .. / .. .. / .. .. / .. ..

SIGNATURE:.....

NEW MEMBER ( ) / RENEWAL ( )
DATE: / /1989

Change-of-Address:
New above / Old label attached ( )

For the AUG confidential records -
I own or am interested in - Macintosh / Mac II
Apple][Apple//e Apple//c A pple //GS

APPLE USERS GROUP (Sydney)
P.O.Box 505, BANKSTOWN, N.S.W., 2200

Office use only:

SOFTWARE LIBRARY LISTING:

PASCAL: 1+3 ; PASC 2+4 ; PASC 5 ; PASC 6A ; PASC 6B ; PASCAL 7 ;

CP/M: 1+2 ; CP/M 3 ; CP/M 4 ; CP/M 5 ; CP/M 6 ;

Apple //: A-FST'82 ; PC85 ; AUG 1to4 ; 5+6+7+8 ; 9+10+11 ; 12+13 ; 14 ; 15 ; 16 ; 17 ; 18 ; 19 ; 20 ; 21 ; 22 ; 23 ; 24 ; 25 ; 26 ; 27 ; 28 ; 29 ; 30 ; 31 ; 32 ; 33 ; 34 ; 35 ; 36 ; 37 ; 38 ; 39 ; 40 ; 41 ; 42 ; 43 ; 44 ; 45 ; 46 ; 47 ; 48 ; 49 ; 50 ; 51 ; 52 ; 53 ; 54 ; 55 ; 56 ; 57 ; 58 ; 59 ; 60 ; 61 ; 62 ; 63 ; 64 ; 65 ; 66 ; 67 ; 68 ; 69 ; 70 ; 71 ; 72 ; 73 ; 74 ; 75 ; 76 ; 77 ; 78 ; 79 ; 80 ; 81 ; 82 ; 83 ; 84 ; 85 ; 86 ; 87 ; 88 ; (LATEST; 78-88)

TOTAL of Apple 5.25inch disks;

( ) x $ 6.00 = $.....

N.B.: 3 Disks or more cost $5 each!!!

Apple // (3.5"): A1 ; A2 ;

Apple GS: GS1a ; GS2 ; GS3 ; GS4 ; GS5 ; GS6 ; GS7 ; GS8 ; GS9 ; GS10 ; GS11 ; GS12 ; GS13 ; GS15 ; GS16 ;GS17 ; GS18 ; GS19 ; GS20 ; GS21 ;GS22 ; GS23 ; GS24 ; GS25 ; GS26 ;

CIRCLE THE DISKS OF YOUR CHOICE!

TOTAL of Apple 3.5inch disks;

( ) x $10.00 = $.....

N.B.: 3 Disks or more cost $9 each!!!

Public Domain Pac#1

(10 D/S disks) @ $50 = $.....

Public Domain Pac#2

(4 D/S disks) @ $20 = $.....

AppleWorks Data Set#1

(6 D/S dsks)@ $30 = $.....

AppleWorks Data Set#2

(4 D/S dsks)@ $20 = $.....

Mailing cost $4/package ..... = $.....

Macintosh Disks

AUG: 01-06 ; 07-11 ; 12-16 ; 15 ; 17-19 ; 20-22 ; 23-25 ; 26-27 ;

AGM & EXPO 85 & MUSIC ; CUSTOM Finder ;

Comms:01-03;02;04

Fonts: 01-02;03-04;05-06;07;08;09;

Games: 01-02;03-04;05-06;07-10;08;09; 11;12;13;14;15;16;17;18;19;20;21

Laser: 01-02;03;04;05 / **Education:** 01

Pictures: 01-02;03-04;05 &Startup 01; 06;07;08;09 / **Graphics:**01;02;03

Program: 01-02;03 & Basic01;04;

Sound: 1-2;03;04;05;06;07;08;09;10; 11;12;13;14;15;16;17;18;19;20

H/CStacks:01;02;03;04;05;06;07;08;09; 10;11;12;13;14;15;16;17;18;19;20; 21;22;23;24;25;26

Starter disks: 01;02;03;04;

Utils: 01-02;03-04;05-06;07;08;09; 10;11;12;13;14;15;16;17;18;19

MacII: 01;02;03;04;05;06

Demo Disks:

- Aldus FreeHand / • Aldus PageMaker 3
- MacDraw Advert / • MacDraw Intro
- Project & Write & Paint Demo;
- Claris HyperDemo Master;
- MacDraw HyperDemo™;
- MacPaint HyperDemo™;
- MacProj HyperDemo™;
- MacWriteHyperDemo™;
- Design Cframe LogicWork Demo;
- Easy3D &Mac3D Demo;
- Fontastic/DocModel Demo;
- Ragtime/InterMail Demo;
- Reflex &Calc Constrn Demo;
- SpellsWell & PBS Demo;
- StatW &CrckGraf &Draw Demo;
- Trapeze Spreadsheet Demo;
- TYPEQUICK Demo • PowerDraw 2.00
- FullWrite • FullImpact

CIRCLE THE DISKS OF YOUR CHOICE!

TOTAL of MAC-DISKS;

( ) x $10.00 = $.....

N.B.: 3 Disks or more cost $9 each!!!

Beginners Pac#1

(5 x 800K disks) @ $40 = $.....

Mailing cost $4/package ..... = $.....

AUDIO TAPES of meetings:

Month:.....@ 3.50 = $.....

10 Months ..SPECIAL!. @ $30.00 = $.....

MAGAZINES - Back Issues:

Anniversary Collection $15.00 = $.....

========

SUB - TOTAL = $.....

SOFTWARE LIBRARY ORDER FORM

Name:.....

Ph:.(H).....(W).....

Address:.....

Suburb:.....State:.....P/C:.....

Membership No.....(Will be checked)

OR: **Stick address label here as proof of membership.**

AUG (SYDNEY) BULK PURCHASE NOTES

PHONE ANSWERING SERVICE FOR BP/LIBRARY PHONE: (02) 681 3661

Appleworks DATA DISKS
Two collections of Appleworks templates on double-sided 5.25 inch disks. Details in Oct 86/Aug 87. **$30/$20**

Apple // - Special Public Domain Disks
Two collections of a variety of Public Domain software - well documented and tested (no games) on double-sided 5.25 inch disks. Details Nov 86/Aug 87. **$50/$20**

G.E.O.S. for Apple //c, //3, IIGS
Macintosh-like Graphic Disk Operating System with Word Processor, Spelling Checker and Paint program - **P.O.A.**
Call for availability

G.E.O.S. Publish for Apple //c, //3, IIGS
DeskTop Publishing on Apples, with or without GEOS. Compatible with Printshop and AppleWorks files
New Release **$173**
Call for availability

TERMINAPPLE
Terminal software to provide *all* Apple //s with communic's (incl. 1200/75). Menu-driven, easy to understand. Needs one drive and Serial card. **$100**

VIATERM
Software for Apple //, GS to access VIATEL using all 1200/75 modems. Easy use, auto Log-On. **$100**

MODEMS
Netcomm 3+12 modem **$210**
Maestro 2400 ZXR (300, 1200/75, 2400, Hayes Comp. and auto everything **$Call**
cables extra **$30**

MODEM Packages
using Netcomm 3+12 modem (300 & 1200/75 baud)
Modem & Terminapple **$295**
Modem & VIATERM **$295**
Modem & Terminapple & VIATERM **$395**
Postage per package $5.00

MAESTRO MODEM
Model 2400 ZXR (300-2400 baud & 1200/75 for VIATEL)
Full duplex, Hayes compatible, and auto everything
(Cables for all apple computers available).
Call for availability and **SPECIAL Member's prices**

Joysticks
For][+, //e (16pin plug) & //e, //c, IIGS (9 pin plug)
Specify your computer **$32**

No-Slot Clock
Original US product, gives time and date with ProDOS and DOS 3.3 programs incl. AppleWorks. Suits Apple //c, e **$99**

Disk Drive Adapter
Connects Apple][or compatible to UniDisk 5.25, //c, IIGS type with 19 pin connectors **$49**

Record Holder Plus
(new version 3.1!)
A powerful database for the Mac. Not copy-protected, Text file/MS. Word compatible. Suit home/shop excellent documentation. **$100**

TurboMouse
Mouse replacements for: Apple //c, Mac 512, MacPlus

OR: Apple IIGS, Mac SE, Mac II (specify model)
SPECIAL Member's price **$110**
Call for Availability

QuickKeys
Programmable Command keys and Macros
A MUST for power users.
SPECIAL Member's price **$110**
Call for Availability

Disk Drive Extension Cable
Extends cable and allows removal without opening computer. Can be used for Epson printers also **$26**

WARNING:
Because of taxation restraints, orders can only be placed by current members.
Please enclose you latest mailing label, or quote number.

POSTAGE/PACKING CHARGES:
Members are requested to add these charges to their orders. If not, the orders will be returned for addition of these costs.

Due to the low margins of profit, we are unable to provide free postage!

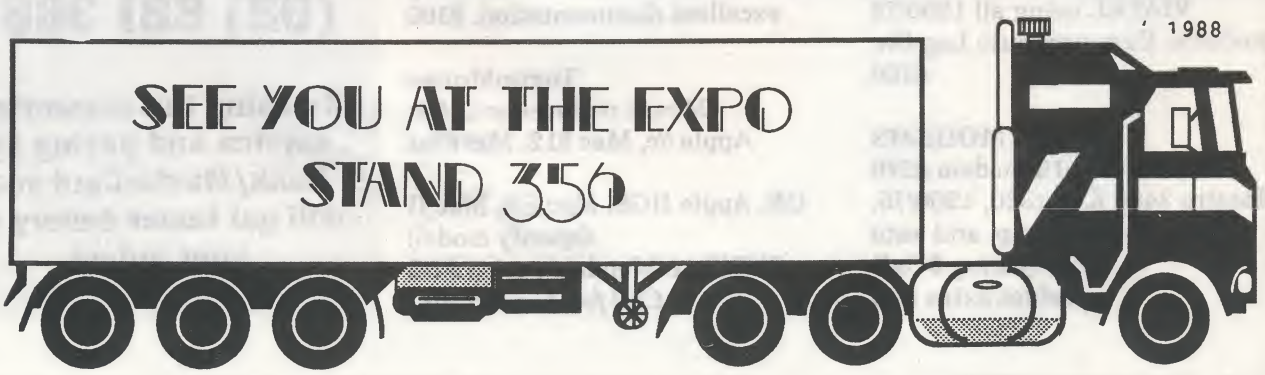
GET IT FASTER

(02) 681 3661

By using the answering service and paying by Bank/MasterCard you will get faster deliery of your orders

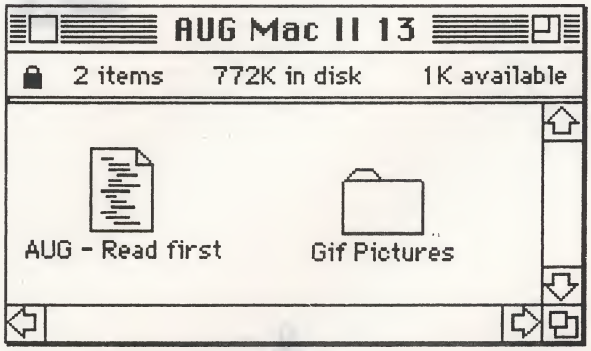
```
-------------------------------------------
MAGAZINE BINDERS (Postage incl) @ $  9  = $.....
MAESTRO Modem ................. P.O.A.  = $.....
Netcomm MODEM (1200/75 & 300).. @ $210  = $.....
Cables for MODEM (Specify comp) @ $ 30  = $.....
Covers for Imagewriter/..(9").. @ $ 18  = $.....
Covers for Imagewriter//....... @ $ 20  = $.....
TURBO-Mouse (Specify Comp.).... @ $110  = $.....
------------ Apple ][,// ----------
G.E.O.S.(//c,//e,//GS)........  P.O.A.  = $.....
G.E.O.S.Publish (//c,//e,//GS). @ $173  = $.....
TERMINAPPLE...(][,//c,//e,//GS) @ $100  = $.....
VIATERM.......(][,//c,//e,//GS) @ $100  = $.....
AVTEK Modem & Terminapple...... @ $295  = $.....
Modem & VIATERM................ @ $295  = $.....
Modem & Terminapple & VIATERM.. @ $395  = $.....
Covers for Apple//e............ @ $ 32  = $.....
Covers for Apple//e + Duodrive. @ $ 33  = $.....
Covers for Apple//c ........... @ $ 27  = $.....
Covers for //c Colour System... @ $ 43  = $.....
Covers for Apple//GS .......... @ $ 33  = $.....
Joysticks (Specify computer)... @ $ 32  = $.....
------------ Macintosh ------------
Mac Dust Covers.(512/Plus/SE).. @ $ 33  = $.....
Mac TORX Screwdriver........... @ $ 25  = $.....
Record HolderPLUS.VS 3.1.... @ $100   = $.....
QuickKeys...................... @ $110  = $.....
Mailing cost $4/package (O/S extra)...  = $.....
-------------------------------------------
BLANK DISKS:- - SPECIAL-SPECIAL-SPECIAL
10 - 3.5" HMS DS/High Dens...(  ) x $70 = $.....
10 - 3.5" SKC/HMS  DS/DD.....(  ) x $24 = $.....
10 - 5.25" NoName  DS/DD.....(  ) x $10 = $.....
Mailing cost $4.00 per box.............. = $.....
--- Add $2 for interstate address ---    ========
BLANK DISK ORDER  for ........SUB-TOTAL = $.....

PLASTIC DISK STORAGE BOXES:
Two-pce with removable clear tinted 'lockable"
lid, which can be placed under box, + dividers.
100 disk Hing/Lock/Rem.Lid.5.25" @ $16  = $.....
80 Disks Hing/Lock/Rem.Lid. 3.5" @ $16  = $.....
Mailing cost  @ $5.00 per disk box      = $.....
                                        ========
BULK-PURCHASE order for ...TOTAL        = $.....

HAVE YOU ADDED THE MAILING COST FOR EVERY ITEM?
Minimum Mailing Cost is $4.00 per package
N.B.:  All mail is surface, Air Mail is extra.
              ** NO INSURANCE **
```

MEMBERS NOTE:: PLEASE USE THE NEW BULK PURCHASE FORM ON PAGE 112

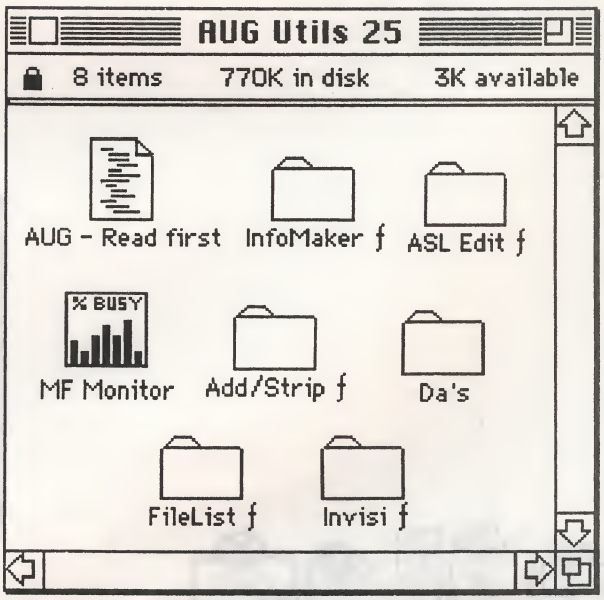


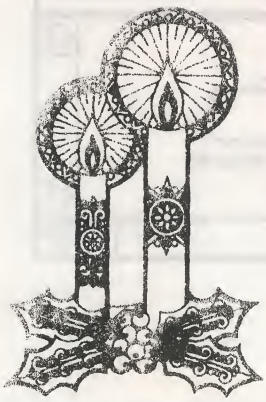
AUG Software Library

Available November 1989



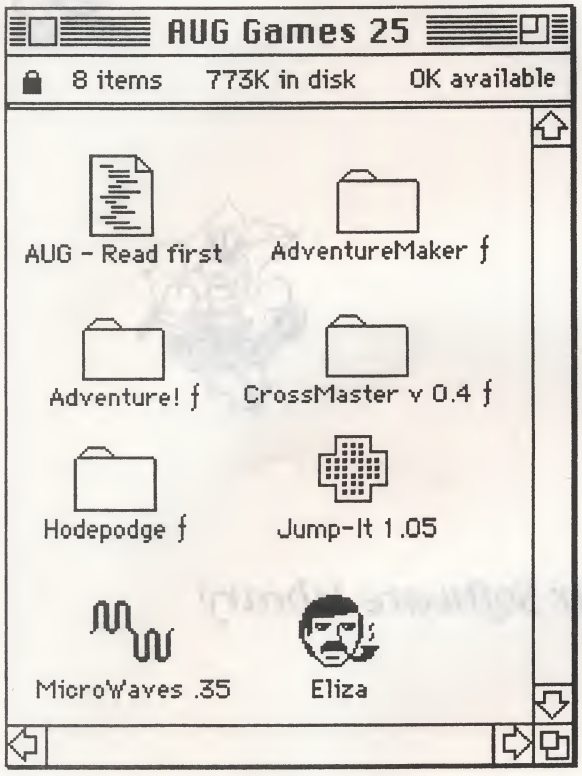
More Top Disks from our Software Library

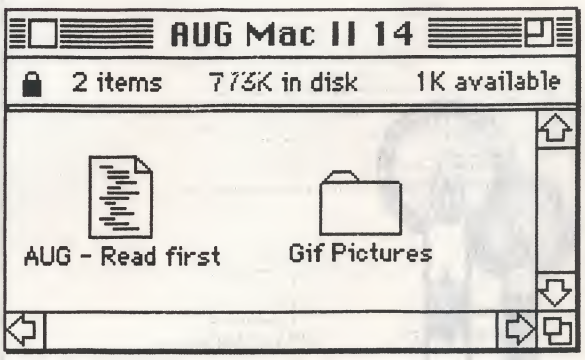




AUG Software Library

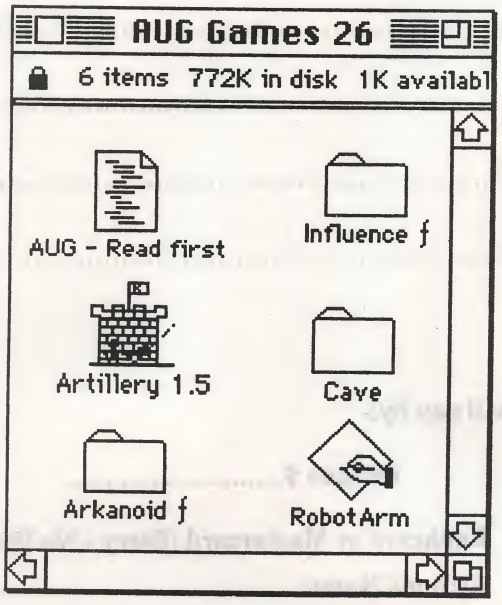
Available November 1989

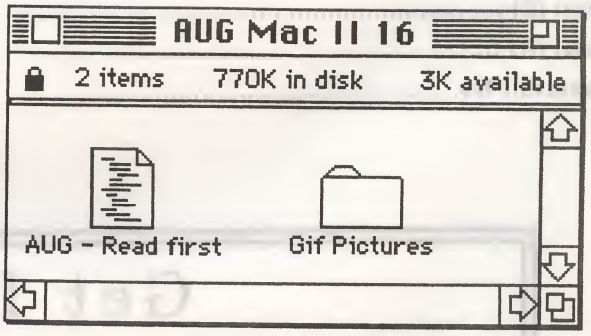


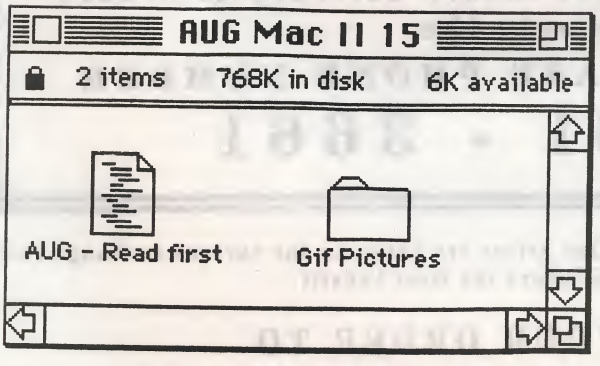


AUG Software Library

Available December 1989







APPLE USERS' GROUP

P.O. 505 BANKSTOWN N.S.W. 2200

Date .....

SOFTWARE AND BULK PURCHASE ORDER

Please send me the following goods::-

1 .....

2 .....

3 .....

4 .....

5 .....

6 .....

7 .....

8 .....

9 .....

10 .....

NAME: .....

ADDRESS: .....

.....

..... POSTCODE:.....

PHONE: (H).....

PHONE: (W) .....

MEMBERSHIP NO. .....

I will pay by:-

Cheque $.....

Bankcard or Mastercard (Sorry - No Visa)

Account Name: .....

CREDITCARD NO. .....

EXPIRY DATE: .....

SIGNATURE: .....

Get It Faster

By using the answering service and paying by Bankcard or Mastercard you will get faster delivery of orders.
Please note the

NEW BULK PURCHASE PHONE NUMBER

(02) 681 - 3661

Pleasecheck prices carefully and use the order form. Our prices are based on the current exchange rate and source of supply to give members the most benefit.

PLEASE SEND YOUR ORDER TO
A.U.G P.O. Box 505 Bankstown N.S.W. 2200

MIND OVER MINORS
Software That Helps You Manage And Motivate Young People.
The advancements of Artificial Intelligence provide parents and teachers with a plan of action based on your personality and the personality of the child in question. • Increase academic performance • Indicates appropriate discipline measures • Improve communication • Helps you handle children more effectively

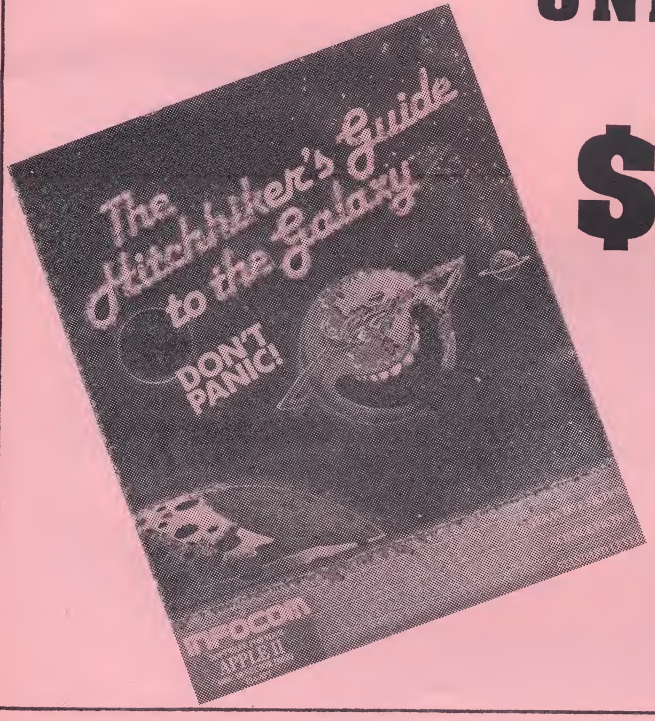
Apple

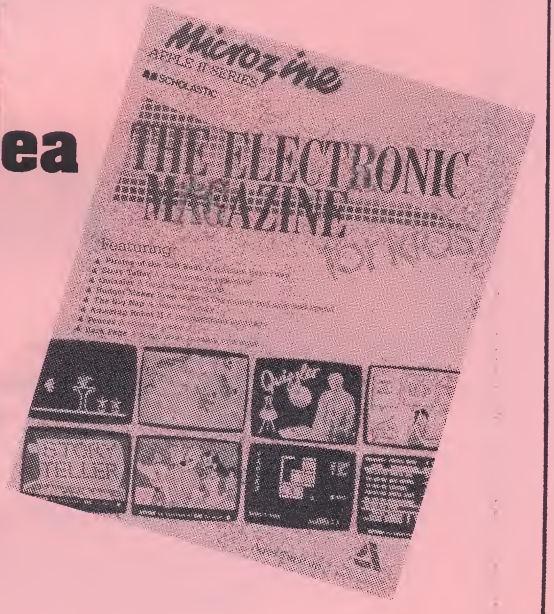
DISKS

SUPER SAVINGS

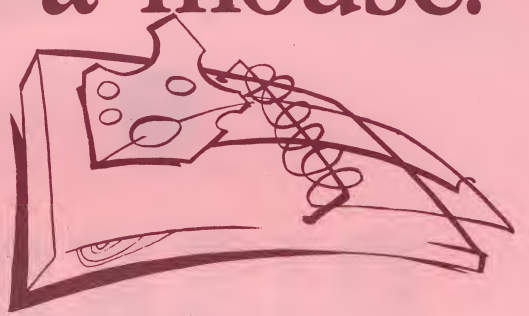
ONLY

$5 ea





See how to make a better mouse trap, with the aid of a mouse.



There's only one way to see everything to do with the Apple Macintosh under one roof and that's to get down to Darling Harbour this November. Macworld Expo is on and it's bigger than ever before.

Just by walking through the door, you could win a new Mac SE, every day!

You will see the superb CAD capabilities of the Mac and many product demonstrations showing the latest Multi Media techniques, integrating Graphics, Sound, Images, Animation, Video and Text. See how to network your Macs to enhance productivity and how the Mac, in a mixed computing environment, can give your organisation that competitive edge.

If you're in business you can't afford to miss Macworld Expo, the Seminars or the Workshops. Save yourself time and energy – see it all at Darling Harbour.

AUSTRALIAN
MACWORLD
Expo

DARLING HARBOUR NOV. 2, 3 & 4

FOR A COMPLETE PROGRAM OF EVENTS

CALL TODAY!

PRESENTED BY:

MACWORLD EXPO PTY LTD

(A DIVISION OF IDG COMMUNICATIONS PTY LTD)

Ph: (02) 439 5133 Fax: (02) 439 5512